



**PHASE II ENVIRONMENTAL SITE ASSESSMENT
80521 MAIN STREET
MEMPHIS, MICHIGAN**

prepared for

**MACOMB COUNTY
DEPARTMENT OF ECONOMIC PLANNING
AND DEVELOPMENT
ONE SOUTH MAIN STREET, 7TH FLOOR
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and

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**AKT Peerless Project No. 7092f-2-20
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PHASE II ENVIRONMENTAL SITE ASSESSMENT

**80521 MAIN STREET
MEMPHIS, MICHIGAN**

AKT PEERLESS PROJECT NO. 7092F-2-20

1.0 INTRODUCTION

Memphis Service, LLC (the User and Developer) retained AKT Peerless Environmental & Energy Services (AKT Peerless) through Macomb County Department of Economic Planning and Development (the Client) to conduct a Phase II Environmental Site Assessment (Phase II ESA) of a property located at 80521 Main Street in Memphis, Michigan (subject property). Macomb County was awarded United States Environmental Protection Agency (USEPA) Brownfield Assessment Grants to conduct environmental assessments of petroleum substance sites. This Phase II ESA was conducted as part of this grant (Cooperative Agreement No. BF-00E82401-0). AKT Peerless understands the Developer plans to renovate the existing property and reopen as a gasoline filling station.

This Phase II ESA was conducted in accordance with AKT Peerless' Proposal for a Phase II ESA (Proposal Number PF-12977), dated January 27, 2012, Phase II Sampling and Analysis Plan (SAP), dated January 18, 2012, and is based on American Society for Testing and Materials (ASTM) Designation E 1903-97 "*Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process.*"

This Phase II ESA scope of work is intended to evaluate the recognized environmental conditions (RECs) presented in Section 2.5. AKT Peerless' Phase II ESA report documents the field activities, sampling protocols, and laboratory results. AKT Peerless' Phase II ESA was performed for the benefit of Memphis Service, LLC and Macomb County Department of Economic Planning and Development, whom may rely on the contents and conclusions of this report.

2.0 BACKGROUND

2.1 SITE DESCRIPTION AND PHYSICAL SETTING

The subject property is located at 80521 Main Street in the northwest ¼ of Section 2 in Memphis (T5N, R14E), Macomb County, Michigan. The subject property is situated west of Main Street. It consists of an irregularly-shaped parcel which contains 0.62 acres (parcel identification number 03-02-131-018). The subject property is currently improved with an unoccupied filling station and associated retail store and service station. The subject property is zoned for commercial use.

Refer to Figure 1 for a topographic site location map. See Figure 2 for a site map with utility locations.

2.2 SUBJECT PROPERTY HISTORY AND LAND USE

The subject property is currently developed as an unoccupied filling station and associated retail store and service station.

The subject property was improved with a residential dwelling and detached garage from prior to 1926, until 1955 when the structures were demolished and the current subject building was constructed. A parking lot was located west of the subject building from 1955 until the late-1960s, when the area was covered with vegetation. The canopy located east of the subject building was constructed in the early-2000s.

2.3 ADJACENT PROPERTY LAND USE

The following table describes the current uses of the adjoining properties, identified occupants, and noteworthy observations of environmental concern, if any, that were noted during AKT Peerless' recent subsurface investigation.

Direction	Address	Current Use / Occupant	Potential Concerns
north	80575 Main Street	institutional / First Baptist Church	none observed
east (north to south)	not identified	none identified / unimproved land	none observed
	80520 Main Street	residential / residential occupants	none observed
south (north to south)	80515 Main Street	commercial / Sherry's Antiquary	none observed
	80481 Main Street	residential / residential occupants	none observed
southwest	34846 Sabin Street	residential / residential occupants	none observed
west	34829 Sabin Street	residential / residential occupants	none observed
northwest	34828 Benton Street	residential / residential occupants	none observed

2.4 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

2.4.1 LUST Investigations Activities

AKT Peerless obtained the following information from the Michigan Department of Environmental Quality (MDEQ) Remediation Division (RD) Southeast Michigan District Office for the subject property:

- April 1998 Confirmed Release Report: Release identified due to statistical inventory and vapors;
- Initial Assessment Report (IAR) prepared in July 1998 by Superior Environmental Corp. (Superior) on behalf of The Star Oil Company, Inc (Star Oil);
- Free Product Recovery Status Reports, prepared monthly from May 1998 through November by Superior on behalf of Star Oil;

- Free Product Recovery Status Reports, prepared in January, September, and December 1999 by Superior on behalf of Star Oil;
- December 1999 Confirmed Release Report: Release identified when product line failed tightness test. Report indicated this was the third release reported for the property;
- Free Product Recovery Status Report, prepared in January 2000 by Superior on behalf of Star Oil;
- Project Status Summary Report, prepared in August 2001 by Innovative Environmental Solutions, Inc (Innovative) on behalf of AMCO Group, Inc (AMCO);
- Free Product Recovery Status Report, prepared in October 2001 by Innovative on behalf of AMCO;
- Free Product Recovery Status Reports, prepared in February, May, and September 2002 by Innovative on behalf of AMCO;
- Free Product Recovery Status Reports, prepared in March, July, October, and November 2003 by Innovative on behalf of AMCO;
- Free Product Recovery Status Reports, prepared in March, July, October, and November 2003 by Innovative on behalf of AMCO;
- Free Product Recovery Status Reports, prepared in March and November 2004 by Innovative on behalf of AMCO;
- Free Product Recovery Status Reports, prepared in May, July, and November 2006 by Innovative on behalf of AMCO;
- Groundwater Monitoring Report, prepared in November 2006 by Innovative on behalf of AMCO;
- Free Product Recovery Status Reports, prepared in February and June 2007 by Innovative on behalf of AMCO;
- Groundwater Monitoring Reports, prepared in January and September 2007 by Innovative on behalf of AMCO;
- Correspondence dated 2006 and 2007 between the MDEQ and AMCO associated with the Final Assessment Report (FAR) deadline and installing an active free product recovery system;
- Free Product Recovery Status Reports, prepared in January, March, June, September, and December 2008 by Innovative on behalf of AMCO;
- Free Product Recovery Status Reports, prepared in March and August 2009 by Innovative on behalf of AMCO;
- Free Product Recovery Status Reports, prepared in May and September 2011 by Innovative on behalf of AMCO;
- Groundwater Monitoring Report, prepared in September 2011 by Innovative on behalf of AMCO;

According to the records reviewed, a confirmed release (No. C-267-98) was reported on April 17, 1998 for the 3,000 gallon gasoline underground storage tank (UST) when a review of records identified a product loss. A subsequent subsurface investigation revealed olfactory evidence of a release. Initial response actions associated with this release included emptying the UST and

repairing the leak by installing a fiberglass lining. Superior advanced nine soil borings in May 1998 to determine the extent of soil and groundwater impact at the subject property. Four of these locations were completed as monitor wells. Soil and groundwater samples were submitted for select laboratory analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl-tert-butyl ether (MTBE), trimethylbenzene isomers (TMBs), 1,2-dichloroethane, 1,2-dibromoethane, naphthalene, 2-methylnaphthalene, polynuclear aromatic hydrocarbons (PNAs), lead, cadmium, and chromium. Laboratory analytical results indicated concentrations of BTEX, MTBE, and TMBs in soil above the current MDEQ Generic Residential Cleanup Criteria (GRCC) including Residential Drinking Water Protection (DWP) Criteria and Groundwater / Surface Water Interface Protection (GSIP) Criteria at depths ranging from 2.5 to 8 feet below ground surface (bgs) in the vicinity of the westernmost pump island and 24 to 26 feet bgs north and east of the southernmost UST basin. In addition, benzene was detected at concentrations that exceed the current MDEQ Soil Volatilization to Indoor Air Inhalation (SVIAI) Criteria at a depth of 5 to 7 feet bgs south of the westernmost dispenser island. Remaining soil samples were either below MDEQ GRCC or laboratory method detection limits (MDLs). Groundwater analytical results identified the presence of BTEX in monitoring wells MW-1 and MW-3 above the current MDEQ GRCC including Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater / Surface Water Interface (GSI) Criteria.

Free product was identified in monitoring well MW-2 during initial assessment activities in May 1998. Free product recovery was initiated by manual bailing and vac-truck recovery. A vac-truck recovery event on May 19, 1998 recovered approximately 7 gallons of free product. A free product status report for MW-2 dated June 1998 identified 2 inches of product on June 4, 1998 and 36 inches of product on June 22, 1998. Free product status reports were submitted monthly for six months after initial discovery with vac-truck events monthly and manual bailing bi-monthly.

On December 10, 1999, a third confirmed release (No. C-1273-99) was reported when the 2,000 gallon and 10,000 gallon gasoline UST product lines failed tightness testing. A copy of the third confirmed release report was not contained in the file.

In August 2000, the UST system was upgraded. Soil samples were collected from beneath the former dispensers and product piping and the canopy footing excavations. Samples were also collected adjacent to the existing gasoline USTs. Select samples were submitted for laboratory analysis of BTEX, MTBE, 1,2-dichloroethane, 1,2-dibromoethane, naphthalene, 2-methylnaphthalene, and lead.

In August 2001, a Project Status Summary Report was prepared by Innovative. This report indicated that the property had been purchased by AMCO and additional assessment activities had been conducted at the subject property to further evaluate the horizontal extent of contamination. These activities included installing three soil borings to further delineate the vertical and horizontal impact at the subject property. One of these soil borings (TB-1) was installed adjacent to MW-2 and the others were installed in the Main Street right-of-way on the boundary of the eastern adjoining residential property and completed as permanent monitor wells (MW-10 and MW-11). In August 2001 and April 2002 an additional nine soil borings which were completed as permanent monitor wells were installed on the northern adjoining property

and eastern and southern adjoining right of ways. To date, right of entry access agreements could not be obtained for the eastern adjoining properties to fully define the horizontal extent of contamination and free product.

Laboratory analytical results from these investigations indicated that BTEX, TMBs, MTBE, naphthalene, 2-methylnaphthalene in soil at depths ranging from 40 to 46 feet bgs at concentrations exceeding MDEQ GRCC including DWP and GSIP Criteria. In addition, concentrations of benzene in MW-12 and MW-11 were detected above SVIAI Criteria and Infinite Source Volatile Soil Inhalation (VSIC) in MW-12. Free product was also detected at the MW-10 and MW-12 locations.

Quarterly groundwater sampling and free product recovery events have been conducted at the subject property since 2000. The most recent groundwater sampling event conducted in September 2011 indicated that concentrations of BTEX, MTBE, TMBs, naphthalene, 2-methylnaphthalene, and/or lead are present at concentrations that exceed the MDEQ GRCC including DW Criteria and GSI Criteria in monitoring wells MW-1, MW-2, MW-3, MW-6, MW-10, MW-11, and MW-12. In addition, concentrations of benzene exceed the MDEQ Groundwater Volatilization to Indoor Air Inhalation (GVIAI) Criteria and Groundwater Contact (GC) Criteria in MW-11.

Free product recovery activities include vac-truck recovery and hand bailing. In June 2011, approximately 370 gallons of groundwater and 57 gallons of free product were removed from the subject property by vac-truck. Free product gauging activities in June, August, and September 2011 did not detect the presence of free product in on or off site monitor wells associated with the subject property. As of September 2011, approximately 4,878.75 gallons of free product have been removed from the subject property.

AKT Peerless also interviewed Ms. Faye Mitchell, the MDEQ Project Manager associated with the leaking underground storage tank (LUST) incidents at the subject property. Ms. Mitchell indicated that the MDEQ is currently considering options for obtaining off-site access to define the extent of free product associated with the releases. Ms. Mitchell indicated this may include the current owner of the subject property taking legal action against adjoining property owners to obtain access. Ms. Mitchell also indicated that quarterly monitoring and free product recovery is on-going at the subject property. Furthermore, Ms. Mitchell indicated that according to the MDEQ's UST inspector (HMSI) the tanks are empty and "red-tagged" which means they cannot be used until they meet UST operating requirements (corrosion protection, over filled protection, etc.).

2.4.2 AKT Peerless' December 2011 Phase I ESA

On December 13, 2011, AKT Peerless completed a Phase I ESA of the subject property on behalf of the Memphis Service, LLC and Macomb County Department of Economic Planning and Development. The purpose of AKT Peerless' Phase I ESA was to evaluate the current and historical conditions of the subject property in an effort to identify *recognized environmental conditions* (RECs) and *historical recognized environmental conditions* (HRECs) in connection with the subject property. AKT Peerless identified the following RECs:

- **REC #1:** The Environmental Data Resources (EDR) Report identified the subject property on the SPILLS, UST, and LUST databases. Three LUST releases were reported for the subject property in 1998 and 1999. Laboratory analytical results identified the presence of BTEX, TMBs, MTBE, and lead in soil and/or groundwater at concentrations that exceed the MDEQ GRCC. The horizontal extent of soil and groundwater impact associated with these releases has not been defined to the east (down-gradient) due to access issues with adjoining property owners. In addition, free product has been present at the subject property since 1998 and the down-gradient extent of the free product plume has not been defined. The status of the LUST releases are considered open. In addition, the MDEQ project manager indicated that the six USTs at the subject property have been “red-tagged” until they have been upgraded to meet UST operating requirements. Based on this information, the subject property meets the definition of a “facility” as defined by Part 201 of NREPA, Michigan PA 451 of 1994, as amended, due to the presence of contamination above the MDEQ GRCC.
- **REC #2:** The subject property was utilized for automotive repair since the subject building was constructed in 1955 until operations ceased in the early-2000s. The EDR Report and MDEQ Resource Management Division (RMD) waste database system (WDS) identified the subject property as a generator of hazardous waste. Furthermore, an oil-water separator was observed in the northern portion of the former automotive service area and one in-ground hydraulic hoists, as well as concrete patching associated with the former location of an additional in-ground hydraulic hoist were observed in this portion of the subject building. In addition, it is likely that the current subject building utilized a septic system from 1955 until the subject property was connected to the municipal system in 1963. It is AKT Peerless’ opinion that a potential exists for the subject property’s soil and/or groundwater to have been adversely affected by the use of the subject property as an automobile repair facility since approximately 1955.

3.0 PHASE II ENVIRONMENTAL SITE ASSESSMENT ACTIVITIES

3.1 SCOPE OF ASSESSMENT

To further evaluate the RECs identified in AKT’s 2011 Phase II ESA, AKT Peerless conducted a subsurface investigation of the subject property that included: (1) the advancement of nine soil borings, (2) the installation of one soil vapor sampling well, and (3) the collection of 12 soil samples, one groundwater sample, and one soil gas sample. The following samples were submitted for laboratory analyses:

- 12 soil samples for select analysis of polychlorinated biphenyls (PCBs), Methyl Tret-Butyl Ether (MTBE), leaded gasoline¹, used oil², and light distillate oils³;
- one groundwater sample for used oil; and,

¹ Leaded Gasoline Parameters Include: BTEX, TMBs, 1,2-dibromoethane, 1,2-dichloroethane, naphthalene, 2-methylnaphthalene, and lead.

² Used Motor Oil Parameters Include: BTEX, TMBs, 1,2-Dibromoethane (EDB), 1,2-Dichloroethane (DCA), PNAs, cadmium, chromium, lead, volatile halocarbons, and DRO.

³ Light Distillate Oils Include: BTEX, TMBs, poly nuclear aromatic hydrocarbons (PNAs), diesel range organics (DRO).

- one soil gas sample for volatile organic compounds (VOCs)

The following table summarizes each REC, the site investigation activities performed to address each REC, and the laboratory parameters used to address each REC.

Summary of AKT Peerless’ Scope of Investigation

REC #	Environmental Concern	Investigation Activity	Analytical Parameters
REC 1	Facility status and “open” LUST	AKT-B-1 and AKT-B-5 through AKT-B-9 and MW-1	Light Distillate Oils, leaded gasoline, MTBE, used oil, and VOCs (soil gas).
REC 2	Historical automotive repair	AKT-B-2 through AKT-B-4	PCBs, used oil, and VOCs (soil gas)

3.1.1 Soil Evaluation

On January 26, 2012, AKT Peerless advanced nine soil borings at the subject property. AKT Peerless used hydraulic drive/direct-push (Geoprobe[®]) and hand auger sampling techniques and followed the drilling procedures outlined in ASTM publication D 6282-98 “*Standard Guide for Direct Push Soil Sampling for Environmental Site Characterizations*”. AKT Peerless collected continuous soil samples from the soil borings in six-inch and four-foot intervals to the maximum depth explored of 17 feet below ground surface (bgs). In addition, AKT Peerless attempted to push down to 30 feet bgs without the sampler to try and reach groundwater. However, because of the type of soil encountered AKT Peerless was only able to get to depths ranging from 20 and 25 feet. AKT Peerless personnel inspected, field-screened, and logged the samples collected at each soil boring location. Refer to Figure 2 for a site map with soil boring locations. Boring logs are provided in Appendix A.

3.1.2 Groundwater Evaluation

AKT Peerless attempted to push down to 30 feet bgs without the sampler to try and reach groundwater. However, because of the type of soil encountered AKT Peerless was only able to get to depths ranging from 20 and 25 feet. AKT Peerless did not encounter groundwater in any of the soil borings advanced at the subject property. However, AKT Peerless did sample an existing permanent well (MW-1) at the subject property. Groundwater was encountered at approximately 43.5 feet below ground surface. Due to the depth of groundwater and the stripping of volatiles, groundwater sampling was not conducted using low-flow sampling methodologies.

3.1.3 Vapor Encroachment Evaluation

On January 26, 2012, AKT Peerless collected a soil gas sample from a soil gas well (SVP-3) using a Bottle-Vac Air Sampler and control valve. AKT Peerless connected the Bottle-Vac to the nylon tubing through the control valve. To verify that infiltration of ambient air was not permeating into the soil gas screen, AKT Peerless monitored the control valve gauge to ensure the pressure remained stable throughout the collection process. These activities were conducted in accordance with *MDEQ’s draft Operational Memorandum #4, attachment 4, Soil Gas and Indoor Air*.

3.1.4 Deviations from the Sampling and Analysis Plan

This Phase II ESA was conducted under a U.S. Environmental Protection Agency (EPA) Brownfield Assessment Grant awarded to Macomb County Department of Economic and Planning Development. On January 18, 2011, AKT Peerless prepared a Phase II SAP on behalf of Macomb County Department of Economic and Planning Development. On January 23, 2012 the SAP was approved by the EPA Region 5 Project Manager. In completing field activities, the following deviations from the approved SAP were made:

- Groundwater was not encountered in borings AKT-B-1, AKT-B-7, and AKT-B-9 at a maximum explored depth of 25 feet bgs
- Groundwater MW-1 was not sampled according to low-flow protocols due to the stripping of volatiles
- Matrix Spike and Matrix Spike Duplicate samples was not be completed for groundwater because only one groundwater sample was collected.

3.2 QUALITY ASSURANCE/QUALITY CONTROL

To ensure the accuracy of data collected during on site activities, AKT Peerless implemented proper quality assurance/quality control (QA/QC) measures. The QA/QC procedures included, but were not limited to, (1) decontamination of sampling equipment before and between sampling events, (2) calibration of field equipment, (3) documentation of field activities, and (4) sample preservation techniques.

3.2.1 Decontamination of Equipment

During sample collection, AKT Peerless adhered to proper decontamination procedures. Sampling equipment was decontaminated using the following methods to minimize potential cross-contamination of soil samples:

- Steam-cleaning or washing and scrubbing the equipment with non-phosphate detergent
- Rinsing the equipment
- Air-drying the equipment

3.2.2 Calibration of Field Equipment

All field instruments were calibrated prior to first use on-site to ensure accuracy. Field instruments utilized during investigation activities at this subject property were a photoionization detector (PID).

During AKT Peerless' Phase II ESA, a photoionization detector (PID) was used to screen all soil samples. The PID was maintained in a calibrated condition using 100 ppm isobutylene span gas prior to subsurface investigations.

3.2.3 Documentation of Activities

During AKT Peerless' Phase II ESA activities, subject property conditions (i.e. soil boring locations, weather conditions) were documented. AKT Peerless visually inspected the soil and groundwater samples and prepared a geologic log for each soil boring. The logs include soil

characteristics such as (1) color, (2) composition (e.g., sand, clay, or gravel), (3) soil moisture and water table depth, and (4) signs of possible contamination (i.e., stained or discolored soil, odors). Soil types were classified in accordance with ASTM publication D-2488 “*Unified Soil Classification System*.” All soil and groundwater samples were delivered to a laboratory under chain-of-custody documentation. See Appendix A for AKT Peerless’ soil boring logs. See Figure 3 for site map with soil boring locations.

3.2.4 Sample Preservation Techniques

AKT Peerless collected soil samples according to USEPA Publication SW-846, “*Test Methods for Evaluating Solid Waste*.” Soil and groundwater samples were collected in laboratory-supplied containers, stored on ice or at approximately 4 degrees Celsius, and submitted under chain-of-custody documentation.

Soil samples collected for volatile analyses were field preserved with methanol in accordance with U.S. EPA Method 5035. Soil samples collected for polynuclear aromatic hydrocarbons (PNAs), polychlorinated biphenyls (PCBs) and metals analyses were stored in unpreserved, 4-ounce wide-mouth jars.

A groundwater sample collected from permanent well, MW-1 was collected with a peristaltic pump and dedicated tubing. Groundwater samples for volatile organic compound analyses were collected with zero headspace into 40 ml glass vials and preserved with hydrochloric acid. Groundwater samples for metal analyses were collected into plastic bottles and preserved with nitric acid. Groundwater samples collected for analysis of PNAs and PCBs were collected into 1-liter amber glass jars.

3.2.5 QA/QC Sample Collection

AKT Peerless collected QA/QC samples for soil and water matrices in accordance with the QA/QC sample procedures outlined in the “*Quality Assurance Project Plan (QAPP), Brownfield Assessment Program, Hazardous Substances and Petroleum Site Assessment Grant, [Macomb County Department of Economic Planning and Development], Michigan*.”, dated June 2009 revision 1. The following table describes the QA/QC samples collected for each matrix.

Summary of AKT Peerless QA/QC Sampling

Number of Assessment Samples & Matrix	Number of QA/QC Samples				
	Equipment Blank (1 per 10/ matrix)	Field Duplicate (1 per 10/matrix)	Trip Blank (1 per day)	Bottle Blank	MS/MSD (1 per 20/matrix)
12/Soil	1	1	1	1	1
1/Water	1	1	NA	NA	NA

3.3 LABORATORY ANALYSES AND METHODS

AKT Peerless submitted 12 soil, one groundwater sample, and one soil gas sample for laboratory analyses. The following table summarizes the location, depth, matrix, and laboratory analysis for each sample.

Summary of Laboratory Analyses

Sample Name/Depth (in feet)	Matrix	Used oil	PCBs	Light distillate	Leaded gasoline	MTBE	VOCs
AKT-B-1 (4-6)	S	-	-	<input checked="" type="checkbox"/>	-	-	-
AKT-B-1 (15-17)	S	-	-	<input checked="" type="checkbox"/>	-	-	-
AKT-B-2 (1-3)	S	<input checked="" type="checkbox"/>	-	-	-	-	-
AKT-B-3 (1-3)	S	<input checked="" type="checkbox"/>	-	-	-	-	-
AKT-B-4 (1-3)	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-
AKT-B-5 (6-8)	S	-	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
AKT-B-6 (1-3)	S	-	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
AKT-B-7 (1-3)	S	-	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
AKT-B-7 (13-15)	S	-	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
AKT-B-8 (6-8)	S	-	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
AKT-B-9 (6-8)	S	<input checked="" type="checkbox"/>	-	-	-	-	-
AKT-B-9 (11-13)	S	<input checked="" type="checkbox"/>	-	-	-	-	-
MW-1	W	<input checked="" type="checkbox"/>	-	-	-	-	-
SVP-3	G	-	-	-	-	-	<input checked="" type="checkbox"/>

Note: S = Soil sample, W = Water sample, G = Gas

The laboratory analyzed the samples for: (1) VOCs (used oil, MTBE, leaded gasoline) in accordance with USEPA Method 8260B; (2) PNAs in accordance with USEPA Method 8270C; (3) cadmium, chromium, and lead in accordance with USEPA Method 6020, (4) PCBs in accordance with USEPA Method 8082, and (5) volatile soil gas components in accordance with USEPA Method TO-15.

4.0 EVALUATION AND PRESENTATION OF RESULTS

4.1 SUBSURFACE CONDITIONS

4.1.1 Soil and Groundwater Conditions based on Published Material

According to the MDEQ Geological Survey Division's *Bedrock Geology of Southern Michigan* (1987), bedrock beneath the subject property is classified as Coldwater Shale of an unassigned group, which is included in the Kinderhookian series within the Mississippian system of the Paleozoic Era. The depth to bedrock beneath the subject property was not readily available prior to the completion of this Phase I ESA.

According to the Michigan Geological Survey Division's publication, *Quaternary Geology of Southern Michigan*, soil in the area is medium-textured glacial till. This soil is described as gray, grayish brown or reddish brown, nonsorted glacial debris; matrix is dominantly loam and silt loam texture, variable amounts of cobbles and boulders. Occurs in narrow linear belts of hummocky relief marking former standstills of ice-sheet margin. Includes areas small areas of

ground moraine as well as outwash. Soil thickness tends to be somewhat greater than adjacent ground moraine areas. Typically, end moraines of medium-textured till are associated with moderate hydraulic permeability.

According to the USDA's *Soil Survey of Macomb County, Michigan (1971)*, the soil at the subject property is classified as the Conover-Parkhill-Locke association, which is described as nearly level to gently sloping, somewhat poorly drained and poorly drained soil that have a moderately fine textured and medium-textured subsoil; on uplands.

Typically, the water table aquifer flows toward a major drainage feature or in the same direction as the drainage basin. Based on previous investigations of the subject property, the groundwater at the subject property flows to the east.

4.1.2 Soil and Groundwater Conditions based on Field Observations

During drilling activities, AKT Peerless encountered the following soil types:

- FILL from below the concrete, topsoil, and asphalt to approximately between one and two feet below ground surface. This fill consisted of brown fine grained sand with trace amounts of clay.
- CLAY from one to two feet bgs to 10 feet below ground surface. This clay was medium-stiff to soft and brown in color. This clay has trace amounts of silt and sand.
- SAND from 10 feet bgs to 25 feet bgs, the maximum depth explored. This sand was very fine grained and silty.

AKT Peerless did not encounter groundwater in any of the soil borings.

Other than the fill material, the geology encountered during this Phase II ESA is consistent with the geology described in the publications noted. Soil boring logs are included as Appendix A.

4.2 MDEQ RELEVANT EXPOSURE PATHWAYS AND APPLICABLE CRITERIA

As defined in Michigan Public Act 451 Part 201, "relevant pathway" means an exposure pathway that is reasonable and relevant because there is a reasonable potential for exposure to a hazardous substance. The analysis of potential exposure pathways is based on known existing conditions at the subject property. However, for the purposes of determining if the subject property meets the definition of a facility, AKT Peerless considers all pathways to be relevant.

Applicable criterion means a cleanup criterion for a relevant pathway. Based on the exposure pathway evaluation, the applicable pathways at the subject property include:

- Drinking Water Protection Criteria (DWP)/Drinking Water Criteria (DW);
- Groundwater to Surface Water Protection Criteria (GSIP)/Groundwater to Surface Water Criteria (GSI);
- Groundwater Contact Protection Criteria (GCP);

- Soil Volatilization to Indoor Air Inhalation (SVIAI)/Groundwater Volatilization to Indoor Air Inhalation (GVIAI);
- Infinite Source Volatile Soil Inhalation (VSI);
- Particulate Soil Inhalation (PSI), and;
- Soil Direct Contact (DC)/Groundwater Contact (GC);
- Soil Saturation Concentration Screening Levels (CSAT);
- Water Solubility (SOL);
- Flammability and Explosivity Screening Levels (FESL); and
- Acute Inhalation Screening Levels (AISL).

4.3 LABORATORY ANALYTICAL RESULTS

AKT Peerless collected soil and groundwater samples for the purpose of determining if the subject property meets the definition of a *facility*. Analytical results were compared with MDEQ Residential Cleanup Criteria provided in MDEQ Remediation and Redevelopment Division’s Operational Memorandum No. 1, Tables 1 and 2.

4.3.1 Soil Analytical Results

AKT Peerless submitted 12 soil samples for laboratory analysis of select parameters including used oil, PCBs, leaded gasoline, MTBE, and light distillate oil. The results of the laboratory analyses of the soil samples are summarized in the table below:

Summary of Soil Analytical Results

Soil Boring Location & Depth	Parameter	MDEQ Criteria Exceeded							
		DWP	GSIP	GCP	SVIAI	VSI	PSI	DC	CSAT
AKT-B-2 (1-3)	Chromium, (total)	-	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	Tetrachloroethylene	<input checked="" type="checkbox"/>	-	-	-	-	-	-	-
AKT-B-3 (1-3)	Tetrachloroethylene	<input checked="" type="checkbox"/>	-	-	-	-	-	-	-
AKT-B-4 (1-3)	Tetrachloroethylene	<input checked="" type="checkbox"/>	-	-	-	-	-	-	-
AKT-B-9 (11-13)	2-Methylnaphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	Benzene	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	-	-	-	-
	Ethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	-	-	-	-
	Naphthalene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	Tetrachloroethylene	<input checked="" type="checkbox"/>	-	-	-	-	-	-	-
	Toluene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	1,2,3-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	1,2,4-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1,3,5-Trimethylbenzen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Soil Boring Location & Depth	Parameter	MDEQ Criteria Exceeded							
		DWP	GSIP	GCP	SVIAI	VSI	PSI	DC	CSAT
	Xylenes	☑	☑	☑	☑	-	-	☑	☑

*- Sample identification: B-# indicates soil boring and (#-#) indicates sample depth in feet.

DWP – Drinking Water Protection Criteria

GSIP – Groundwater Surface Water Interface Protection Criteria

GCP – Groundwater Contact Protection Criteria

SVIAI – Soil Volatilization to Indoor Air Inhalation Criteria

VSI – Volatile Soil Inhalation Criteria

PSI – Particulate Soil Inhalation Criteria

DC – Direct Contact Criteria

CSAT – Saturation Concentration Screen Levels

Refer to Figure 3 for a site map with soil analytical results exceeding MDEQ criteria. Refer to Table 1 for a summary of soil analytical results. Refer to Appendix B for a complete analytical laboratory report.

4.3.2 Groundwater Analytical Results

AKT Peerless submitted one groundwater samples for laboratory analysis of used oil parameters. The results of the laboratory analyses of the groundwater samples are summarized in the table below:

Summary of Groundwater Analytical Results

Soil Boring Location & Depth	Parameter	MDEQ Criteria Exceeded			
		DW	GSI	GC	GVIAI
MW-1	2-Methylnaphthalene	-	☑	-	-
	Benzene	☑	☑	-	-
	Ethylbenzene	☑	☑	-	-
	Naphthalene	-	☑	-	-
	Toluene	☑	☑	-	-
	1,2,3-Trimethylbenzene	☑	☑	-	-
	1,2,4-Trimethylbenzene	☑	☑	-	-
	1,3,5-Trimethylbenzen	☑	☑	-	-
	Xylenes	☑	☑	-	-

*- Sample identification: MW-# indicates monitor well.

DW – Drinking Water

GSI – Groundwater Surface Water Interface Criteria

GC – Groundwater Contact Criteria

GVIAI – Groundwater Volatilization to Indoor Air Inhalation Criteria

Refer to Figure 4 for a site map with soil analytical results exceeding MDEQ criteria. Refer to Table 2 for a summary of groundwater analytical results. Refer to Appendix B for a complete analytical laboratory report.

4.3.3 Soil Gas Analytical Results

AKT Peerless submitted one soil gas sample for laboratory analysis of VOCs. Analytical results indicated that concentrations of tetrachloroethylene were detected above the MDEQ-Sub Slab Residential Acceptable Soil Gas Screening Concentrations, but below the non-residential concentrations in AKT-B3SG. Refer to Table 3 for a summary of soil gas analytical results. Refer to Appendix B for a complete analytical laboratory report. Refer to Figure 5 for a site map with soil gas analytical results.

4.3.4 Quality Assurance/Quality Control Analytical Results

4.3.4.1 Soil

QA/QC samples were collected in accordance with the Macomb County QAPP. Samples meet hold times, were analyzed in accordance with the specified methods. The field duplicate sample and the MS/MSD were within expected limits. There were no unexpected detections in the trip blank, field equipment blank, or bottle blank.

4.3.4.2 Groundwater

QA/QC samples were collected in accordance with the Macomb County QAPP. Samples meet hold times, were analyzed in accordance with the specified methods. The field duplicate sample was within expected limits. There were no unexpected detections in the trip blank or field equipment blank.

5.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 SUMMARY OF ENVIRONMENTAL CONCERNS

Based on AKT Peerless' December 2011, Phase I ESA, the following environmental concerns were identified:

- Facility status and "open" LUST status for the subject property
- Historical use of subject property for automotive repair

5.2 SUMMARY OF SUBSURFACE INVESTIGATION

On January 26, 2012, AKT Peerless conducted a subsurface investigation at the subject property to evaluate the environmental concerns identified AKT Peerless' December 2011 Phase I ESA. AKT Peerless (1) advanced nine soil borings, (2) installed one soil vapor sampling well, and (3) collected soil, groundwater, and soil gas samples for laboratory analyses. AKT Peerless submitted soil and groundwater samples for laboratory analyses of select parameters, including: PCBs, MTBE, leaded gasoline parameters, used oil parameters, and light distillate oils. Soil gas samples were submitted for laboratory analyses of VOCs.

5.3 CONCLUSIONS

AKT Peerless conducted soil, groundwater, and soil gas sampling in areas most likely to be impacted by contaminants based on the past use of the subject property. The results of the investigation indicate the following:

- Chromium and tetrachloroethylene were detected in subsurface soils collected within the subject building (AKT-B-2, AKT-B-3, and AKT-B-4) at concentrations exceeding the MDEQ Part 201 Generic Residential Cleanup Criteria. Tetrachloroethylene was detected above the DWP criteria and chromium was detected above the GSIP criteria.
- Concentrations of VOCs including 2-methylnaphthalene, naphthalene, BTEX, TMBs, and tetrachloroethylene were detected in the subsurface soil collected near the existing USTs (AKT-B-9) at concentrations exceeding MDEQ Part 201 GRCC soil saturation criteria.
- 2-methylnaphthalene, naphthalene, BTEX and TMBs were detected in the groundwater sample collected from existing monitoring well MW-1 at concentrations exceeding the MDEQ Part 201 GRCC for residential DW criteria and GSI criteria.
- Concentrations of tetrachloroethylene were detected above MDEQ Sub-Slab Residential Acceptable Soil Gas Screening Concentrations in AKT-B3SG.

Based on laboratory analytical results, the subject property meets the definition of a *facility*, as defined in Part 201 of the NREPA, Michigan Public Act (PA) 451, 1994, as amended.

5.4 RECOMMENDATIONS

Based on the presence of facility level contamination at the subject property, AKT Peerless recommends future owner(s)/operator(s) prepare a Baseline Environmental Assessment (BEA) report. Section 26(1)(c) of Part 201 provides certain liability protections to a person who becomes an owner or operator of a *facility* on, or after June 5, 1995 if they comply with both of the following, or unless other defenses apply: a BEA is conducted prior to or within 45 days after the earlier of the date of purchase, occupancy, or foreclosure, and the owner or operator discloses the results of the BEA to the MDEQ and subsequent purchaser or transferee.

In addition, because the subject property meets the definition of a facility, AKT Peerless recommends conducting a Section 20107(a) Compliance Analysis to assure compliance with Due Care obligations. Due Care obligations include:

- Undertaking measures to prevent exacerbation of existing contamination.
- Exercising due care by undertaking response activities to mitigate unacceptable exposure to hazardous substances, mitigate fire and explosion hazards due to hazardous substances, and allow for the intended use of the subject property in a manner that protects health and safety.
- Taking reasonable precautions against the reasonably foreseeable acts or omissions of a third party and the consequences that could result from those acts or omissions.
- Provide notifications to the MDEQ and others in regard to mitigating fire and explosions hazards, discarded or abandoned containers, contamination migrating beyond property boundaries, as applicable.

- Comply with any land use or resource use restrictions established or relied on in connection with the response activities at the facility.
- Not impede the effectiveness or integrity of any land use or resource restriction employed at the facility in connection with response activities.

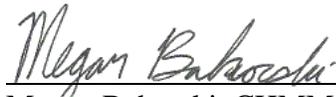
6.0 LIMITATIONS

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Subject to the above and the terms and conditions, AKT Peerless accepts responsibility for the competent performance of its duties in executing the assignment and preparing reports in accordance with the normal standards of the profession, but disclaims any responsibility for consequential damages. Although AKT Peerless believes that results contained herein are reliable, AKT Peerless cannot warrant or guarantee that the information provided is exhaustive or that the information provided by Memphis Service, LLC and Macomb County or third parties is complete or accurate.

7.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The following individuals contributed to the completion of this investigation.



Megan Bahorski, CHMM
Environmental Consultant

AKT PEERLESS ENVIRONMENTAL AND ENERGY SERVICES
Southeast Michigan Office

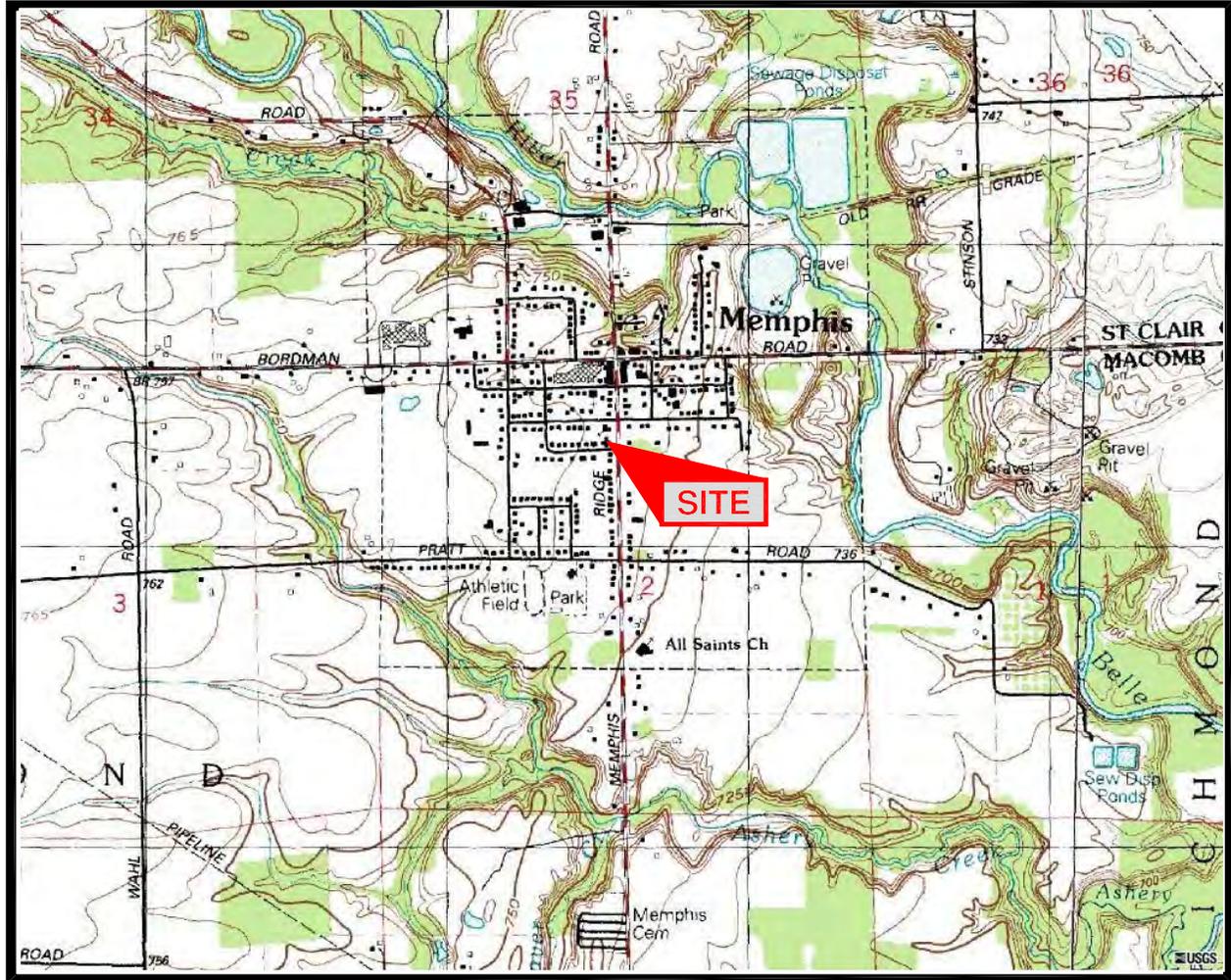


Jessica T. Cory
Project Manager

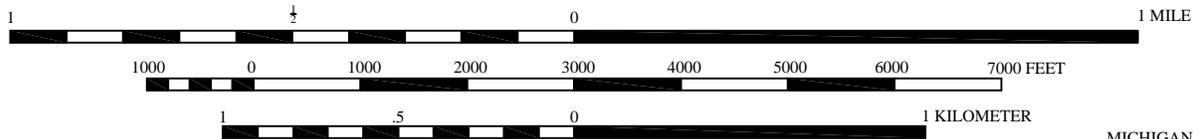
AKT PEERLESS ENVIRONMENTAL AND ENERGY SERVICES
Southeast Michigan Office

FIGURES

MEMPHIS QUADRANGLE
 MICHIGAN - MACOMB COUNTY
 7.5 MINUTE SERIES (TOPOGRAPHIC)



T.5 N. - R.14 E.



CONTOUR INTERVAL 5 FEET
 DATUM IS MEAN SEA LEVEL



IMAGE TAKEN FROM 1991 U.S.G.S. TOPOGRAPHIC MAP

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TOPOGRAPHIC LOCATION MAP

80521 MAIN STREET
 MEMPHIS, MICHIGAN
 PROJECT NUMBER : 7092F-1-17

DRAWN BY: JWB
 DATE: 2/13/2012

FIGURE 1

Residential Dwelling
34828 Benton Street

First Baptist Church
80575 Main Street

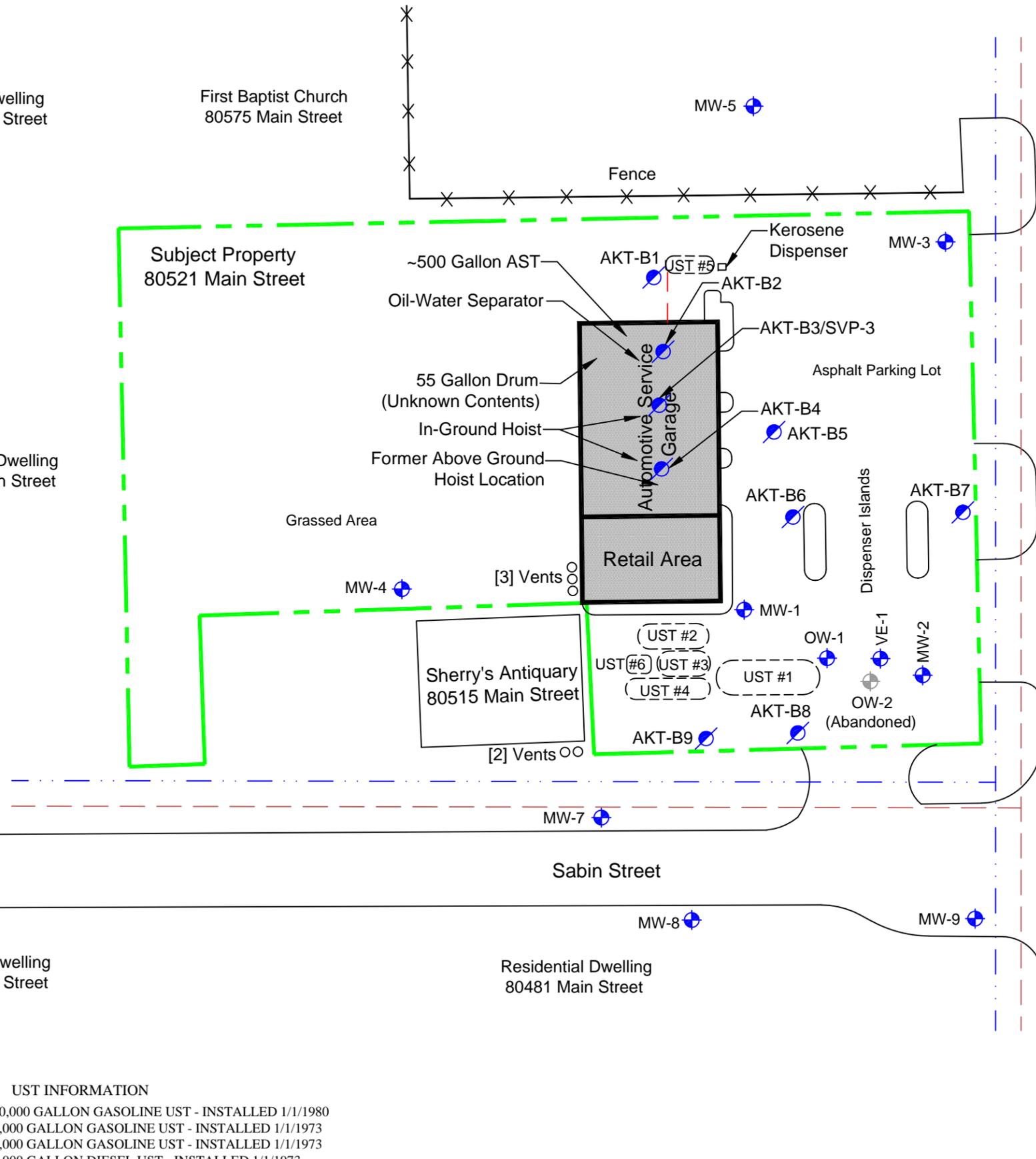
Residential Dwelling
34829 Sabin Street

Residential Dwelling
34846 Sabin Street

Residential Dwelling
80481 Main Street

Subject Property
80521 Main Street

Sherry's Antiquary
80515 Main Street



DRAWN BY: JW/B
DATE: 2/17/2012

SCALE: 1" = 30'-0"

FIGURE 2

LEGEND

- = PROPERTY LINE
- = AKT PEERLESS SOIL BORING
- = MONITORING WELL
- = WATER LINE
- = SEWER LINE
- = ELECTRIC LINE

SITE MAP WITH SOIL BORING AND
MONITORING WELL LOCATIONS

80521 MAIN STREET
MEMPHIS, MICHIGAN
PROJECT NUMBER : 7092F-2-20

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UST INFORMATION

- UST #1 - CURRENT 10,000 GALLON GASOLINE UST - INSTALLED 1/1/1980
- UST #2 - CURRENT 3,000 GALLON GASOLINE UST - INSTALLED 1/1/1973
- UST #3 - CURRENT 2,000 GALLON GASOLINE UST - INSTALLED 1/1/1973
- UST #4 - CURRENT 4,000 GALLON DIESEL UST - INSTALLED 1/1/1973
- UST #5 - CURRENT 550 GALLON KEROSENE UST - INSTALLED 1/1/1973
- UST #6 - CURRENT 550 GALLON USED OIL UST - INSTALLED 5/2/1971

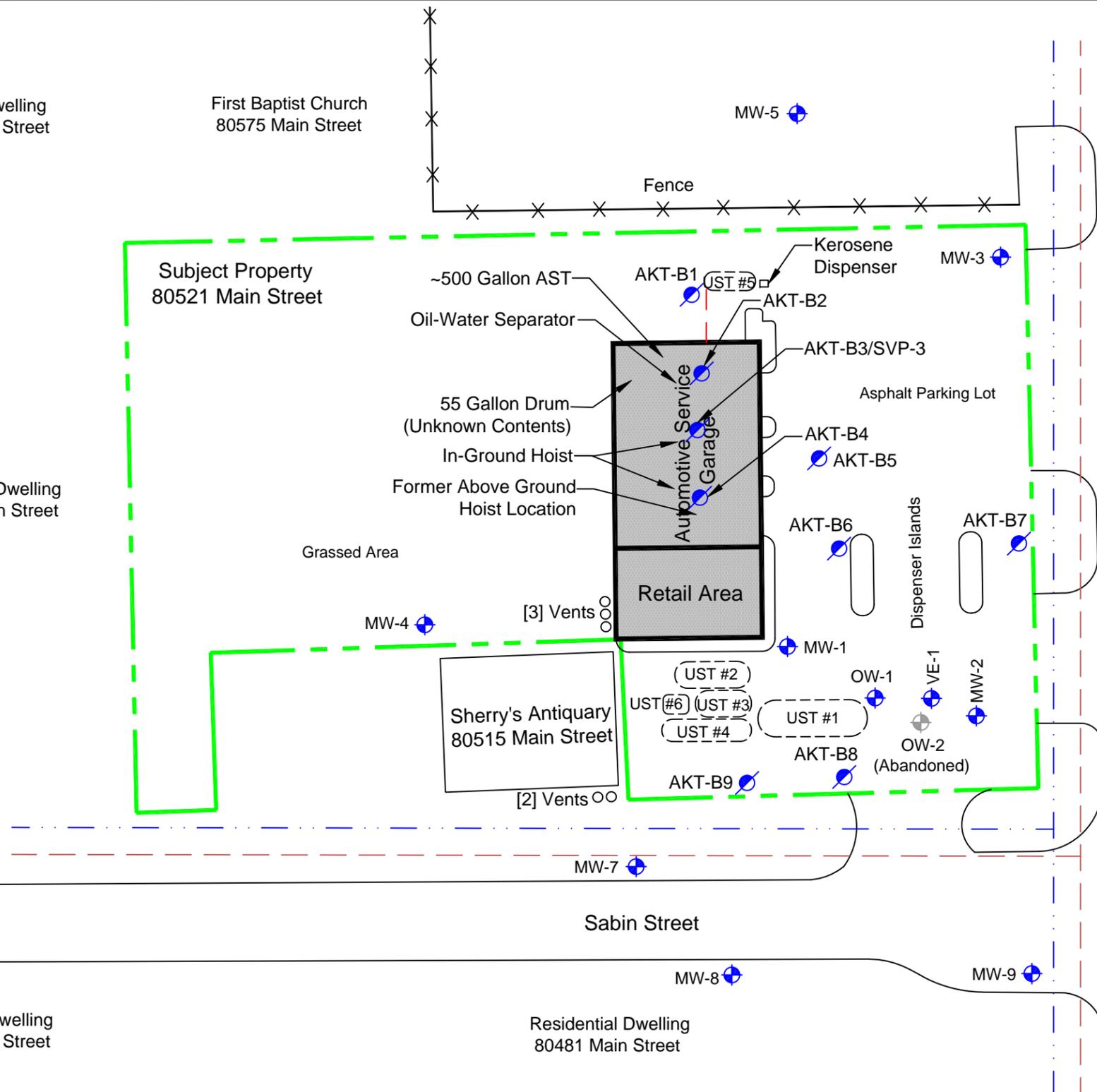
Residential Dwelling
34828 Benton Street

First Baptist Church
80575 Main Street

Residential Dwelling
34829 Sabin Street

Residential Dwelling
34846 Sabin Street

Residential Dwelling
80481 Main Street



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- UST #6 - CURRENT 550 GALLON USED OIL UST - INSTALLED 5/2/1971



DRAWN BY: JWBJ
DATE: 2/17/2012
SCALE: 1" = 30'-0"
FIGURE 3

LEGEND

- - - - - PROPERTY LINE
- AKT PEERLESS SOIL BORING
- MONITORING WELL
- WATER LINE
- SEWER LINE
- ELECTRIC LINE

AKT-B2 1-3'	
1/26/2012	
Chromium	19,000 ug/kg
Tetrachloroethylene	150 ug/kg

AKT-B3 1-3'	
1/26/2012	
Tetrachloroethylene	530 ug/kg

AKT-B4 1-3'	
1/26/2012	
Tetrachloroethylene	380 ug/kg

AKT-B9 11-13'	
1/26/2012	
2-Methylnaphthalene	5,400 ug/kg
Benzene	2,600 ug/kg
Ethylbenzene	120,000 ug/kg
Naphthalene	39,000 ug/kg
Toluene	500,000 ug/kg
1,2,3 Trimethylbenzene	67,000 ug/kg
1,2,4 Trimethylbenzene	280,000 ug/kg
1,3,5 Trimethylbenzene	100,000 ug/kg
Xylenes	710,000 ug/kg

SITE MAP WITH SOIL ANALYTICAL RESULTS ABOVE MDEQ GRCC

80521 MAIN STREET
MEMPHIS, MICHIGAN
PROJECT NUMBER : 7092F-2-20

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Residential Dwelling
34828 Benton Street

First Baptist Church
80575 Main Street

Residential Dwelling
34829 Sabin Street

Residential Dwelling
34846 Sabin Street

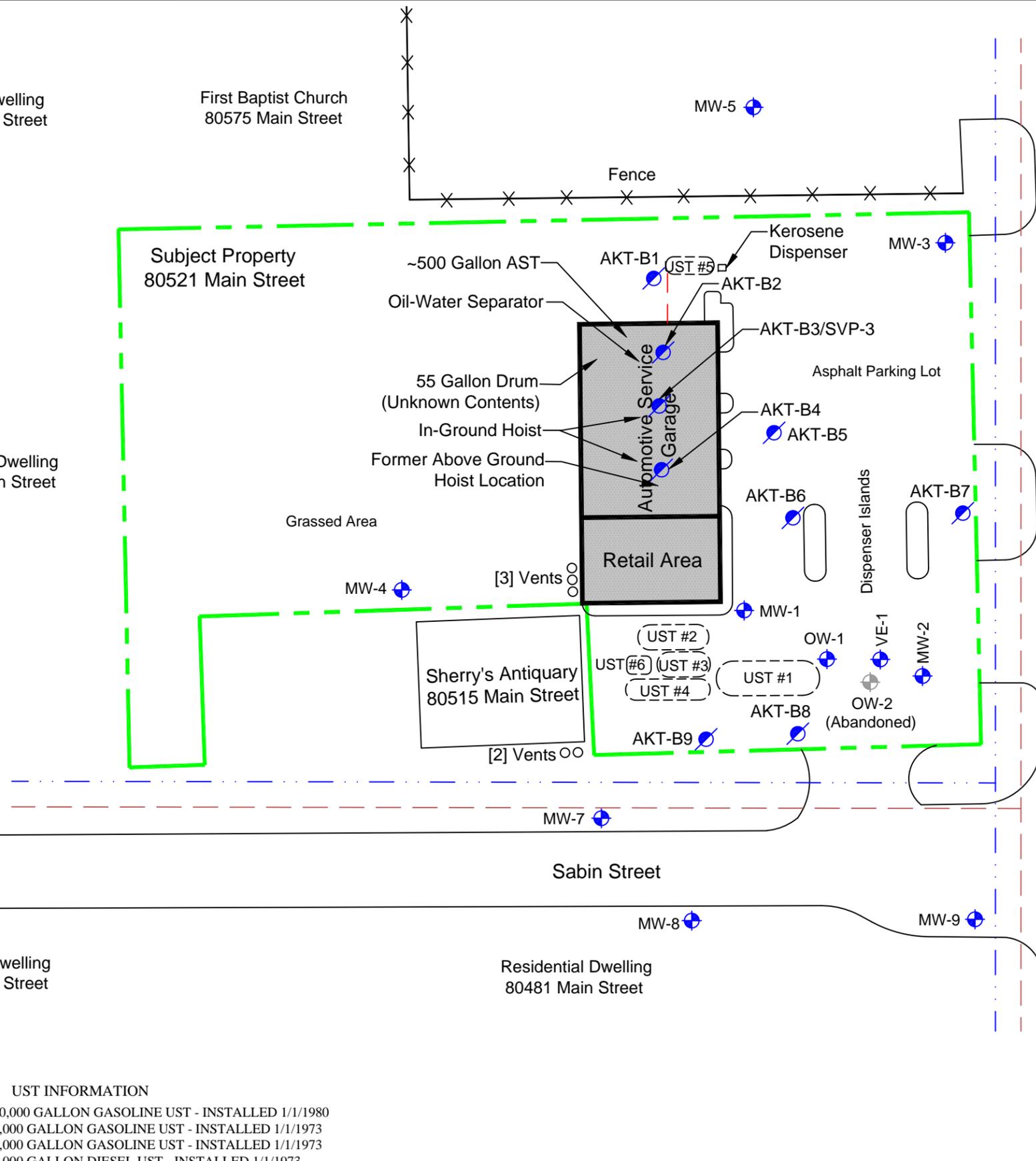
Residential Dwelling
80481 Main Street

Subject Property
80521 Main Street

Sherry's Antiquary
80515 Main Street

UST INFORMATION

- UST #1 - CURRENT 10,000 GALLON GASOLINE UST - INSTALLED 1/1/1980
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- UST #4 - CURRENT 4,000 GALLON DIESEL UST - INSTALLED 1/1/1973
- UST #5 - CURRENT 550 GALLON KEROSENE UST - INSTALLED 1/1/1973
- UST #6 - CURRENT 550 GALLON USED OIL UST - INSTALLED 5/2/1971



MW-1 43.5'	
1/26/2012	
2-Methylnaphthalene	170 ug/L
Benzene	730 ug/L
Ethylbenzene	160 ug/L
Naphthalene	110 ug/L
Toluene	2,000 ug/L
1,2,3 Trimethylbenzene	230 ug/L
1,2,4 Trimethylbenzene	1,100 ug/L
1,3,5 Trimethylbenzene	360 ug/L
Xylenes	1,200 ug/L

DRAWN BY: JW B
DATE: 2/17/2012
SCALE: 1" = 30'-0"
FIGURE 4

LEGEND

- = PROPERTY LINE
- = AKT PEERLESS SOIL BORING
- = MONITORING WELL
- = WATER LINE
- = SEWER LINE
- = ELECTRIC LINE

SITE MAP WITH GROUNDWATER ANALYTICAL RESULTS ABOVE MDEQ GRCC
80521 MAIN STREET
MEMPHIS, MICHIGAN
PROJECT NUMBER: 7092F-2-20

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Residential Dwelling
34828 Benton Street

First Baptist Church
80575 Main Street

Subject Property
80521 Main Street

Residential Dwelling
34829 Sabin Street

Grassed Area

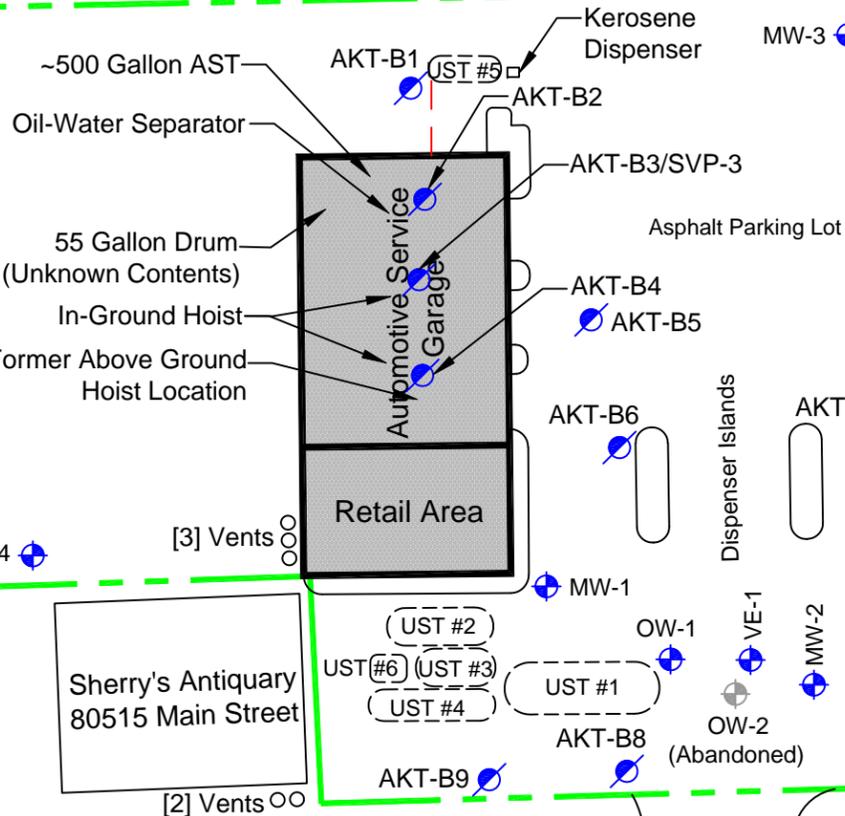
Sherry's Antiquary
80515 Main Street

Residential Dwelling
34846 Sabin Street

Residential Dwelling
80481 Main Street

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- UST #2 - CURRENT 3,000 GALLON GASOLINE UST - INSTALLED 1/1/1973
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- UST #4 - CURRENT 4,000 GALLON DIESEL UST - INSTALLED 1/1/1973
- UST #5 - CURRENT 550 GALLON KEROSENE UST - INSTALLED 1/1/1973
- UST #6 - CURRENT 550 GALLON USED OIL UST - INSTALLED 5/2/1971



SVP-AKT-3 4'
1/26/2012
Tetrachloroethylene 980 ppbv



DRAWN BY: JW/B
DATE: 2/17/2012

0 15 30
SCALE: 1" = 30'-0"

FIGURE 5

LEGEND

- = PROPERTY LINE
- = AKT PEERLESS SOIL BORING
- = MONITORING WELL
- = WATER LINE
- = SEWER LINE
- = ELECTRIC LINE

SITE MAP WITH SOIL GAS ANALYTICAL RESULTS

80521 MAIN STREET
MEMPHIS, MICHIGAN
PROJECT NUMBER: 7092F-2-20

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MW-13

Vacant Land

MW-6

MW-11

Residential Dwelling
80520 Main Street

MW-10

MW-12

Main Street

Sabin Street

TABLES

Table 1, Summary of Soil Analytical Results

80521 Main Street
 Memphis, Michigan
 AKT Peerless Project No. 7092f-2-20

Guidesheet Number →		#10	#11	#12	#13	#14	#15	#18	#19	#20									
Parameters* <i>*(Refer to detailed laboratory report for method reference data)</i>	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria and RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Residential Soil Volatilization to Indoor Air Inhalation Criteria and RBSLs	Residential Infinite Source Volatile Soil Inhalation Criteria (VSIC) and RBSLs	Residential Particulate Soil Inhalation Criteria and RBSLs	Residential Direct Contact Criteria and RBSLs	Residential Soil Saturation Concentration Screening Levels	Maximum Concentration Detected	Sample Location	AKT-B1	AKT-B1	AKT-B2	AKT-B3	AKT-B4	AKT-B5	
												Collection Date	1/26/2012	1/26/2012	1/26/2012	1/26/2012	1/26/2012	1/26/2012	1/26/2012
												Depth	(4-6)	(15-17)	(1-3)	(1-3)	(1-3)	(1-3)	(6-8)
Metals ug/Kg																			
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	2.3E+8	NLV	NLV	1.7E+6	5.5E+5	NA	330		NA	NA	260	180	330	NA	
Chromium, Total	7440-47-3	18,000 (total)	30,000	3,300	1.4E+8	NLV	NLV	2.6E+5	2.5E+6	NA	19,000		NA	NA	19,000	18,000	12,000	NA	
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	ID	NLV	NLV	1.0E+8	4.0E+5	NA	22,000		NA	NA	13,000	13,000	20,000	17,000	
PCBs ug/Kg																			
Polychlorinated biphenyls (PCBs) (J,T)	1336-36-3	NA	NLL	NLL	NLL	3.0E+6	2.4E+5	5.2E+6	(T)	NA	<330		NA	NA	NA	NA	<330	NA	
Semivolatiles, PNAs ug/Kg																			
Acenaphthene	83-32-9	NA	3.0E+5	8,700	9.7E+5	1.9E+8	8.1E+7	1.4E+10	4.1E+7	NA	330		<330	<330	<330	<330	<330	NA	
Acenaphthylene	208-96-8	NA	5,900	ID	4.4E+5	1.6E+6	2.2E+6	2.3E+9	1.6E+6	NA	330		<330	<330	<330	<330	<330	NA	
Anthracene	120-12-7	NA	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	6.7E+10	2.3E+8	NA	330		<330	<330	<330	<330	<330	NA	
Benzo(a)anthracene (Q)	56-55-3	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NA	330		<330	<330	<330	<330	<330	NA	
Benzo(a)pyrene (Q)	50-32-8	NA	NLL	NLL	NLL	NLV	NLV	1.5E+6	2,000	NA	330		<330	<330	<330	<330	<330	NA	
Benzo(b)fluoranthene (Q)	205-99-2	NA	NLL	NLL	NLL	ID	ID	ID	20,000	NA	330		<330	<330	<330	<330	<330	NA	
Benzo(g,h,i)perylene	191-24-2	NA	NLL	NLL	NLL	NLV	NLV	8.0E+8	2.5E+6	NA	330		<330	<330	<330	<330	<330	NA	
Benzo(k)fluoranthene (Q)	207-08-9	NA	NLL	NLL	NLL	NLV	NLV	ID	2.0E+5	NA	330		<330	<330	<330	<330	<330	NA	
Chrysene (Q)	218-01-9	NA	NLL	NLL	NLL	ID	ID	ID	2.0E+6	NA	330		<330	<330	<330	<330	<330	NA	
Dibenzo(a,h)anthracene (Q)	53-70-3	NA	NLL	NLL	NLL	NLV	NLV	ID	2,000	NA	330		<330	<330	<330	<330	<330	NA	
Fluoranthene	206-44-0	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	7.4E+8	9.3E+9	4.6E+7	NA	330		<330	<330	<330	<330	<330	NA	
Fluorene	86-73-7	NA	3.9E+5	5,300	8.9E+5	5.8E+8	1.3E+8	9.3E+9	2.7E+7	NA	330		<330	<330	<330	<330	<330	NA	
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NA	330		<330	<330	<330	<330	<330	NA	
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	5.5E+6	2.7E+6	1.5E+6	6.7E+8	8.1E+6	NA	5,400		<330	<330	<330	<330	<330	<330	
Phenanthrene	85-01-8	NA	56,000	2,100	1.1E+6	2.8E+6	1.6E+5	6.7E+6	1.6E+6	NA	330		<330	<330	<330	<330	<330	NA	
Pyrene	129-00-0	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	6.7E+9	2.9E+7	NA	330		<330	<330	<330	<330	<330	NA	
Volatiles, VOCs ug/Kg																			
Benzene (I)	71-43-2	NA	100	4,000 (X)	2.2E+5	1,600	13,000	3.8E+8	1.8E+5	4.0E+5	2,600		<50	<50	<50	<50	<50	<50	
1,2-Dichloropropane (I)	78-87-5	NA	100	4,600 (X)	3.2E+5	4,000	25,000	2.7E+8	1.4E+5	5.5E+5	<1000		NA	NA	<50	<50	<50	NA	
Ethylbenzene (I)	100-41-4	NA	1,500	360	1.4E+5 (C)	87,000	7.2E+5	1.0E+10	1.4E+5 (C)	1.4E+5	120,000		<50	<50	<50	<50	<50	<50	
Naphthalene	91-20-3	NA	35,000	730	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	NA	39,000		<330	<330	<330	<330	<330	<330	
Tetrachloroethylene	127-18-4	NA	100	1,200 (X)	88,000 (C)	11,000	1.8E+5	5.4E+9	88,000 (C)	88,000	530		NA	NA	150	530	380	NA	
Toluene (I)	108-88-3	NA	16,000	5,400	2.5E+5 (C)	2.5E+5 (C)	2.8E+6	2.7E+10	2.5E+5 (C)	2.5E+5	500,000		<50	430	<50	200	<50	<50	
Trichloroethylene	79-01-6	NA	100	4,000 (X)	4.4E+5	7,100	78,000	1.8E+9	5.0E+5 (C,DD)	5.0E+5	<1000		NA	NA	<50	<50	<50	NA	
1,2,3-Trimethylbenzene	526-73-8	NA	1,800	570	94,000 (C)	94,000 (C)	1.6E+7	8.2E+10	94,000 (C)	94,000	67,000		<100	<100	<100	<100	<100	<100	
1,2,4-Trimethylbenzene (I)	95-63-6	NA	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.1E+7	8.2E+10	1.1E+5 (C)	1.1E+5	280,000		<100	<100	<100	<100	<100	<100	
1,3,5-Trimethylbenzene (I)	108-67-8	NA	1,800	1,100	94,000 (C)	94,000 (C)	1.6E+7	8.2E+10	94,000 (C)	94,000	100,000		<100	<100	<100	<100	<100	<100	
Xylenes (I)	1330-20-7	NA	5,600	820	1.5E+5 (C)	1.5E+5 (C)	4.6E+7	2.9E+11	1.5E+5 (C)	1.5E+5	710,000		<150	220	<150	<150	<150	<150	
Remaining VOCs	Various	-	-	-	-	-	-	-	-	-	-		ND	ND	ND	ND	ND	ND	

Table 1, Summary of Soil Analytical Results

80521 Main Street
 Memphis, Michigan
 AKT Peerless Project No. 7092f-2-20

Guidesheet Number →		#10	#11	#12	#13	#14	#15	#18	#19	#20								
Parameters*	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria and RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Residential Soil Volatilization to Indoor Air Inhalation Criteria and RBSLs	Residential Infinite Source Volatile Soil Inhalation Criteria (VSIC) and RBSLs	Residential Particulate Soil Inhalation Criteria and RBSLs	Residential Direct Contact Criteria and RBSLs	Residential Soil Saturation Concentration Screening Levels	Maximum Concentration Detected	Sample Location	AKT-B-6	AKT- B-7	AKT- B-7	AKT-B-8	AKT-B-9	AKT-B-9
												Collection Date	1/26/2012	1/26/2012	1/26/2012	1/26/2012	1/26/2012	1/26/2012
												Depth	(1-3)	(1-3)	(13-15)	(6-8)	(6-8)	(11-13)
Metals ug/Kg																		
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	2.3E+8	NLV	NLV	1.7E+6	5.5E+5	NA	330		NA	NA	NA	NA	300	71
Chromium, Total	7440-47-3	18,000 (total)	30,000	3,300	1.4E+8	NLV	NLV	2.6E+5	2.5E+6	NA	19,000		NA	NA	NA	NA	14,000	3,800
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	ID	NLV	NLV	1.0E+8	4.0E+5	NA	22,000		11,000	11,000	3,600	11,000	22,000	4,200
PCBs ug/Kg																		
Polychlorinated biphenyls (PCBs) (J,T)	1336-36-3	NA	NLL	NLL	NLL	3.0E+6	2.4E+5	5.2E+6	(T)	NA	<330		NA	NA	NA	NA	NA	NA
Semivolatiles, PNAs ug/Kg																		
Acenaphthene	83-32-9	NA	3.0E+5	8,700	9.7E+5	1.9E+8	8.1E+7	1.4E+10	4.1E+7	NA	330		NA	NA	NA	NA	<330	<330
Acenaphthylene	208-96-8	NA	5,900	ID	4.4E+5	1.6E+6	2.2E+6	2.3E+9	1.6E+6	NA	330		NA	NA	NA	NA	<330	<330
Anthracene	120-12-7	NA	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	6.7E+10	2.3E+8	NA	330		NA	NA	NA	NA	<330	<330
Benzo(a)anthracene (Q)	56-55-3	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NA	330		NA	NA	NA	NA	<330	<330
Benzo(a)pyrene (Q)	50-32-8	NA	NLL	NLL	NLL	NLV	NLV	1.5E+6	2,000	NA	330		NA	NA	NA	NA	<330	<330
Benzo(b)fluoranthene (Q)	205-99-2	NA	NLL	NLL	NLL	ID	ID	ID	20,000	NA	330		NA	NA	NA	NA	<330	<330
Benzo(g,h,i)perylene	191-24-2	NA	NLL	NLL	NLL	NLV	NLV	8.0E+8	2.5E+6	NA	330		NA	NA	NA	NA	<330	<330
Benzo(k)fluoranthene (Q)	207-08-9	NA	NLL	NLL	NLL	NLV	NLV	ID	2.0E+5	NA	330		NA	NA	NA	NA	<330	<330
Chrysene (Q)	218-01-9	NA	NLL	NLL	NLL	ID	ID	ID	2.0E+6	NA	330		NA	NA	NA	NA	<330	<330
Dibenzo(a,h)anthracene (Q)	53-70-3	NA	NLL	NLL	NLL	NLV	NLV	ID	2,000	NA	330		NA	NA	NA	NA	<330	<330
Fluoranthene	206-44-0	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	7.4E+8	9.3E+9	4.6E+7	NA	330		NA	NA	NA	NA	<330	<330
Fluorene	86-73-7	NA	3.9E+5	5,300	8.9E+5	5.8E+8	1.3E+8	9.3E+9	2.7E+7	NA	330		NA	NA	NA	NA	<330	<330
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NA	330		NA	NA	NA	NA	<330	<330
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	5.5E+6	2.7E+6	1.5E+6	6.7E+8	8.1E+6	NA	5,400		<330	<330	<330	<330	<330	5,400
Phenanthrene	85-01-8	NA	56,000	2,100	1.1E+6	2.8E+6	1.6E+5	6.7E+6	1.6E+6	NA	330		NA	NA	NA	NA	<330	<330
Pyrene	129-00-0	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	6.7E+9	2.9E+7	NA	330		NA	NA	NA	NA	<330	<330
Volatiles, VOCs ug/Kg																		
Benzene (I)	71-43-2	NA	100	4,000 (X)	2.2E+5	1,600	13,000	3.8E+8	1.8E+5	4.0E+5	2,600		<50	<50	<50	<50	<50	2,600
1,2-Dichloropropane (I)	78-87-5	NA	100	4,600 (X)	3.2E+5	4,000	25,000	2.7E+8	1.4E+5	5.5E+5	<1000		NA	NA	NA	NA	<50	<1,000
Ethylbenzene (I)	100-41-4	NA	1,500	360	1.4E+5 (C)	87,000	7.2E+5	1.0E+10	1.4E+5 (C)	1.4E+5	120,000		<50	<50	<50	<50	<50	120,000
Naphthalene	91-20-3	NA	35,000	730	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	NA	39,000		<330	<330	<330	<330	<330	39,000
Tetrachloroethylene	127-18-4	NA	100	1,200 (X)	88,000 (C)	11,000	1.8E+5	5.4E+9	88,000 (C)	88,000	530		NA	NA	NA	NA	<50	<50
Toluene (I)	108-88-3	NA	16,000	5,400	2.5E+5 (C)	2.5E+5 (C)	2.8E+6	2.7E+10	2.5E+5 (C)	2.5E+5	500,000		<50	<50	<50	<50	<50	500,000
Trichloroethylene	79-01-6	NA	100	4,000 (X)	4.4E+5	7,100	78,000	1.8E+9	5.0E+5 (C,DD)	5.0E+5	<1000		NA	NA	NA	NA	<50	<1,000
1,2,3-Trimethylbenzene	526-73-8	NA	1,800	570	94,000 (C)	94,000 (C)	1.6E+7	8.2E+10	94,000 (C)	94,000	67,000		<100	<100	<100	<100	<100	67,000
1,2,4-Trimethylbenzene (I)	95-63-6	NA	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.1E+7	8.2E+10	1.1E+5 (C)	1.1E+5	280,000		<100	<100	<100	<100	<100	280,000
1,3,5-Trimethylbenzene (I)	108-67-8	NA	1,800	1,100	94,000 (C)	94,000 (C)	1.6E+7	8.2E+10	94,000 (C)	94,000	100,000		<100	<100	<100	<100	<100	100,000
Xylenes (I)	1330-20-7	NA	5,600	820	1.5E+5 (C)	1.5E+5 (C)	4.6E+7	2.9E+11	1.5E+5 (C)	1.5E+5	710,000		<150	<150	<150	<150	<150	710,000
Remaining VOCs	Various	-	-	-	-	-	-	-	-	-	-		ND	ND	ND	ND	ND	ND

Table 2, Summary of Groundwater Analytical Results

80521 Main Street
 Memphis, Michigan
 AKT Peerless Project No. 7092f-2-20

Guidesheet Number	→	#1	#3	#4	#6			
Parameters*	Chemical Abstract Service Number	Residential Drinking Water Criteria & RBSLs	Groundwater Surface Water Interface Criteria & RBSLs	Residential Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Groundwater Contact Criteria & RBSLs	Maximum Concentration Detected	Sample Location	MW-1
*(Refer to detailed laboratory report for method reference data)							Collection Date	1/26/2012
							Depth	43.5
Metals ug/L								
Cadmium (B)	7440-43-9	5.0 (A)	(G,X)	NLV	1.9E+5	<1		<1
Chromium, Total	7440-47-3	100 (A)	11	NLV	4.6E+5	<10		<10
Lead (B)	7439-92-1	4.0 (L)	(G,X)	NLV	ID	<3		<3
Semivolatiles, PNAs ug/L								
Acenaphthene	83-32-9	1,300	38	4,200 (S)	4,200 (S)	<5		<5
Acenaphthylene	208-96-8	52	ID	3,900 (S)	3,900 (S)	<5		<5
Anthracene	120-12-7	43 (S)	ID	43 (S)	43 (S)	<5		<5
Benzo(a)anthracene (Q)	56-55-3	2.1	ID	NLV	9.4 (S,AA)	<1.1		<1.1
Benzo(a)pyrene (Q)	50-32-8	5.0 (A)	ID	NLV	1.0 (M,AA); 0.64	<1.1		<1.1
Benzo(b)fluoranthene (Q)	205-99-2	1.5 (S, AA)	ID	ID	1.5 (S,AA)	<1.1		<1.1
Benzo(g,h,i)perylene	191-24-2	1.0 (M); 0.26 (S)	ID	NLV	1.0 (M,AA); 0.26 (S)	<1.1		<1.1
Benzo(k)fluoranthene (Q)	207-08-9	1.0 (M); 0.8 (S)	NA	NLV	1.0 (M,AA); 0.8 (S)	<1.1		<1.1
Chrysene (Q)	218-01-9	1.6 (S)	ID	ID	1.6 (S,AA)	<1.1		<1.1
Dibenzo(a,h)anthracene (Q)	53-70-3	2.0 (M); 0.21	ID	NLV	2.0 (M,AA); 0.31	<2		<2
Fluoranthene	206-44-0	210 (S)	1.6	210 (S)	210 (S)	<1.1		<1.1
Fluorene	86-73-7	880	12	2,000 (S)	2,000 (S)	<5		<5
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	2.0 (M); 0.022 (S)	ID	NLV	2.0 (M, AA); 0.022 (S)	<2		<2
2-Methylnaphthalene	91-57-6	260	19	25,000 (S)	25,000 (S)	170		170
Phenanthrene	85-01-8	52	2.0 (M); 1.4	1,000 (S)	1,000 (S)	<2		<2
Pyrene	129-00-0	140 (S)	ID	140 (S)	140 (S)	<5		<5
Volatiles, VOCs ug/L								
Benzene (I)	71-43-2	5.0 (A)	200 (X)	5,600	11,000	730		730
Ethylbenzene (I)	100-41-4	74 (E)	18	1.1E+5	1.7E+5 (S)	160		160
Ethylene dibromide	106-93-4	0.05 (A)	5.7 (X)	2,400	25	<1		<1
Naphthalene	91-20-3	520	11	31,000 (S)	31,000 (S)	110		110
Toluene (I)	108-88-3	790 (E)	270	5.3E+5 (S)	5.3E+5 (S)	2,000		2,000
1,2,4-Trimethylbenzene (I)	95-63-6	63 (E)	17	56,000 (S)	56,000 (S)	1,100		1,100
1,3,5-Trimethylbenzene (I)	108-67-8	72 (E)	45	61,000 (S)	61,000 (S)	360		360
Xylenes (I)	1330-20-7	280 (E)	41	1.9E+5 (S)	1.9E+5 (S)	1,200		1,200
Remaining VOC	Various	-	-	-	-	-		ND



Table 3, Summary of Soil Gas Analytical Results

**80521 Main Street
Memphis, Michigan
AKT Peerless Project No. 7092f-2-20**

Parameters*	Chemical Abstract Service Number	SUB-SLAB Residential Soil Gas Criteria _(a)	SUB-SLAB Non-Residential Soil Gas Criteria _(a)	Maximum Concentration Detected	Sample Location	SVP-AKT-3
*(Refer to detailed laboratory report for method reference data)		(ppbv) _(b)	(ppbv) _(b)		Collection Date	1/26/2012
					Depth	4 feet
<i>Volatiles, VOCs ppbv</i>						
Benzene	71432	46	190	1		1
2-Butanone (MEK)	78933	88,000	130,000	2.6		2.6
Chlorobenzene	108907	790	1,100	0.44		0.44
Ethylbenzene	100414	900	3,700	0.53		0.53
n-Heptane	142825	45,000	64,000	2		2
n-Hexane	110543	10,000	15,000	2.2		2.2
Propylene glycol	57556	NLV	NLV	35		35
Tetrachloroethylene	127184	310	1,300	980		980
Toluene	108883	69,000	99,000	4.5		4.5
1,1,1-Trichloroethane	71556	57,000	82,000	1.9		1.9
Trichloroethylene	79016	130	540	1.8		1.8
1,2,4-Trimethylbenzene	95636	2,300	3,300	0.49		0.49
Xylenes	1330207	1,200	1,700	2.45		2.45
Remaining VOCs	Various	-	-	-		ND

FOOTNOTES

FOR THE PART 201 CRITERIA/PART 213 RISK-BASED SCREENING LEVELS
RRD OPERATIONAL MEMORANDUM No. 1

- (A) Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 pa 399, mcl 325.1005.
 - (B) Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.
 - (C) Value presented is a screening level based on the chemical-specific generic soil saturation concentration (C_{sat}) since the calculated risk-based criterion is greater than C_{sat} . Concentrations greater than C_{sat} are acceptable cleanup criteria for this pathway where a site-specific demonstration indicates that free-phase material containing a hazardous substance is not present.
 - (D) Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 parts per billion (ppb).
 - (E) Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).
 - (F) Criterion is based on adverse impacts to plant life and phytotoxicity.
 - (G) Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
 - (H) Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria.
 - (I) Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules.
 - (J) Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.
 - (K) Hazardous substance may be flammable or explosive, or both.
 - (L) Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specific rules.
 - (M) Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
 - (N) The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater that is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 ug/L. Where leaching to groundwater is a relevant pathway, soil concentrations of all potential sources of nitrate-nitrogen shall not, when added together, exceed the nitrate drinking water protection criterion of 2.0E+5 ug/kg.
 - (O) The concentration of all polychlorinated and polybrominated dibenzodioxin and dibenzofuran isomers present at a facility, expressed as an equivalent concentration of 2,3,7,8-tetrachlorodibenzo-p-dioxin based upon their relative potency, shall be added together and compared to the criteria for 2,3,7,8-tetrachlorodibenzo-p-dioxin.
 - (P) Amenable cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with all groundwater criteria. Total cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with soil criteria. Industrial-commercial direct contact criteria may not be protective of the potential for release of hydrogen cyanide gas. Additional land or resource use restrictions may be necessary to protect for the acute inhalation concerns associated with hydrogen cyanide gas.
 - (Q) Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.
 - (R) Hazardous substance may exhibit the characteristic of reactivity as defined in 40 C.F.R. §261.23 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at the DEQ, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the superintendent of documents, government printing office, washington, dc 20401 (stock number 869-044-00155-1), or from the dEQ, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.
 - (S) Criterion defaults to the hazardous substance-specific water solubility limit.
 - (T) Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, subpart d and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart d and subpart g of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules and are available for inspection at the DEQ, 525 West Allegan Street, Lansing, Michigan. Copies of the regulations may be purchased, at a cost as of the time of adoption of these rules of \$55, from the superintendent of documents, Government Printing Office, Washington, dc 20401, or from the dEQ, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost. Alternatives to compliance with the tscA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the following table if TSCA standards are not applicable.
 - (U) Hazardous substance may exhibit the characteristic of corrosivity as defined in 40 C.F.R. §261.22 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at the DEQ, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of Documents, Government Printing Office, Washington, dc 20401 (stock number 869-044-00155-1), or from the dEQ, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.
 - (V) Criterion is the aesthetic drinking water value as required by Section 20120a(5) of the NREPA. concentrations up to 200 ug/L may be acceptable, and still allow for drinking water use, as part of a site-specific cleanup under Section 20120a(2) of the NREPA.
 - (W) Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 80 ug/L. Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criterion of 1,600 ug/kg.
 - (X) The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. For a groundwater discharge to the Great Lakes and their connecting waters or discharge in close proximity to a water supply intake in inland surface waters, the generic GSI criterion shall be the surface water human drinking water value (HDV) listed in the table in this footnote, except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion shall be the lowest of the HDV, the WV, and the calculated FCV. see formulas in footnote (G). Soil protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk shall be the greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.
 - (Y) Source size modifiers shown in the following table shall be used to determine soil inhalation criteria for ambient air when the source size is not one-half acre.
 - (Z) Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.
 - (AA) Comparison to these criteria may take into account an evaluation of whether the hazardous substances are adsorbed to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.
 - (BB) The state drinking water standard for asbestos is in units of fibers per milliliter of water (f/mL) longer than 10 millimicrons. Soil concentrations of asbestos are determined by polarized light microscopy.
 - (CC) Groundwater: The generic GSI criteria are based on the toxicity of unionized ammonia (NH3); the criteria are 29 ug/L and 53 ug/L for cold water and warm water surface water, respectively. As a result, the GSI criterion shall be compared to the percent of the total ammonia concentration in the groundwater that will become NH3 in the surface water. This percent NH3 is a function of the pH and temperature of the receiving surface water and can be estimated using the following table, taken from Emerson, et al., (Journal of the Fisheries Research Board of Canada, Volume 32(12):2382, 1975).
 - (DD) Hazardous substance causes developmental effects. Residential and commercial I direct contact criteria are protective of both prenatal and postnatal exposure. Industrial and commercial II, III and IV direct contact criteria are protective for a pregnant adult receptor.
 - (EE) The following are applicable generic GSI criteria as required by Section 20120a(15) of the NREPA.
 - (FF) The chloride GSI criterion shall be 125 mg/l when the discharge is to surface waters of the state designated as public water supply sources or 50 mg/l when the discharge is to the Great Lakes or connecting waters. Chloride GSI criteria shall not apply for surface waters of the state that are not designated as a public water supply source, however, the total dissolved solids criterion is applicable.
 - (GG) Risk-based criteria are not available for methane due to insufficient toxicity data. An acceptable soil gas concentration (presented for both residential and commercial/industrial land uses) was derived utilizing 25 percent of the lower explosive level for methane. This equates to 1.25 percent or 8.4E+6 ug/m3.
- ID Insufficient data to develop criterion.
- NA A criterion or value is not available or, in the case of background and CAS numbers, not applicable.
- NLL Hazardous substance is not likely to leach under most soil conditions.
- NLV Hazardous substance is not likely to volatilize under most conditions.
- ug/Kg Micrograms per kilogram
- ug/L Micrograms per liter
- NS Not Sampled
- BDL Below Detection Limits

* - Statewide default soil *Background* levels are relevant for all land uses and are substituted for the cleanup *Criterion* for a *Hazardous Substance* whenever the applicable risk-based criterion is lower than the statewide background level for that particular Hazardous Substance (R 299.5706a(5)(b), R 299.5707).

APPENDIX A
SOIL BORING LOGS

APPENDIX B

LABORATORY ANALYTICAL REPORT



Thursday, February 02, 2012

Fibertec Project Number: 48380
Project Identification: 7092F-2-20 /
Submittal Date: 01/26/2012

Ms. Megan Bahorski
AKT Peerless Environ. Svcs, Inc. - Farm. Hills
22725 Orchard Lake Road
Farmington Hills, MI 48336

Dear Ms. Bahorski,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh", written in a cursive style.

Daryl P. Strandbergh
Laboratory Director

DPS/kc

Enclosures

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-001

Order: 48380
Page: 2 of 37
Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B2 (1-3)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **1** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-001A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	17		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-001A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	260		µg/kg	50	20	02/01/12	PT12B01A	02/01/12	T212B01A
2. Chromium	19000		µg/kg	500	20	02/01/12	PT12B01A	02/01/12	T212B01A
3. Lead	13000		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-001			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
2. Bromodichloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
3. Bromoform	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
4. Bromomethane	U		µg/kg	200	1.0	02/01/12	V312B01A	02/01/12	V312B01A
5. Carbon Tetrachloride	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
6. Chlorobenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
7. Chloroethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
8. Chloroform	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
9. Chloromethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
10. Dibromochloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
11. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
12. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
13. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
14. 1,1-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
15. 1,2-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
16. 1,1-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
17. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
18. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
19. 1,2-Dichloropropane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
20. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
21. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
22. Ethylbenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
23. Ethylene Dibromide	U		µg/kg	24	1.0	02/01/12	V312B01A	02/01/12	V312B01A
24. Methylene Chloride	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
25. Naphthalene	U		µg/kg	330	1.0	02/01/12	V312B01A	02/01/12	V312B01A
26. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
27. 1,1,2,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-001

Order: 48380
Page: 3 of 37
Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B2 (1-3)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **1** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-001			Matrix: Soil/Solid		Analyst: JAS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch	
28. Tetrachloroethene	150		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
29. Toluene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
30. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
31. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
32. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
33. Trichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
34. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
35. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
36. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
37. Vinyl Chloride	U		µg/kg	40	1.0	02/01/12	V312B01A	02/01/12	V312B01A	
38. Xylenes	U		µg/kg	150	1.0	02/01/12	V312B01A	02/01/12	V312B01A	

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 48380-001A			Matrix: Soil/Solid		Analyst: HLS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch	
1. Acenaphthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
3. Anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
4. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
5. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
6. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
7. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
8. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
9. Chrysene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
10. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
11. Fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
12. Fluorene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
13. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
14. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
15. Phenanthrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	
16. Pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B	

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-002

Order: 48380
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Date: 02/02/12

Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: AKT-B3 (1-3)	Chain of Custody: 109829
Client Project Name: 7092F-2-20	Sample No: 2	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: NA

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-002A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	15		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-002A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	180		µg/kg	50	20	02/01/12	PT12B01A	02/01/12	T212B01A
2. Chromium	18000		µg/kg	500	20	02/01/12	PT12B01A	02/01/12	T212B01A
3. Lead	13000		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-002		Matrix: Soil/Solid		Analyst: JAS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
2. Bromodichloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
3. Bromoform	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
4. Bromomethane	U		µg/kg	200	1.0	02/01/12	V312B01A	02/01/12	V312B01A
5. Carbon Tetrachloride	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
6. Chlorobenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
7. Chloroethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
8. Chloroform	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
9. Chloromethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
10. Dibromochloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
11. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
12. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
13. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
14. 1,1-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
15. 1,2-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
16. 1,1-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
17. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
18. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
19. 1,2-Dichloropropane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
20. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
21. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
22. Ethylbenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
23. Ethylene Dibromide	U		µg/kg	23	1.0	02/01/12	V312B01A	02/01/12	V312B01A
24. Methylene Chloride	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
25. Naphthalene	U		µg/kg	330	1.0	02/01/12	V312B01A	02/01/12	V312B01A
26. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
27. 1,1,1,2,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-002

Order: 48380
Page: 5 of 37
Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B3 (1-3)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **2** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-002		Matrix: Soil/Solid		Analyst: JAS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
28. Tetrachloroethene	530		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
29. Toluene	200		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
30. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
31. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
32. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
33. Trichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
34. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
35. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
36. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
37. Vinyl Chloride	U		µg/kg	40	1.0	02/01/12	V312B01A	02/01/12	V312B01A
38. Xylenes	U		µg/kg	150	1.0	02/01/12	V312B01A	02/01/12	V312B01A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 48380-002A		Matrix: Soil/Solid		Analyst: HLS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
3. Anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
4. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
5. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
6. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
7. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
8. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
9. Chrysene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
10. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
11. Fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
12. Fluorene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
13. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
14. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
15. Phenanthrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B
16. Pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S612A31B

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-003

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Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: AKT-B4 (1-3)	Chain of Custody: 109829
Client Project Name: 7092F-2-20	Sample No: 3	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: NA

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-003A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	11		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-003A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	330		µg/kg	50	20	02/01/12	PT12B01A	02/01/12	T212B01A
2. Chromium	12000		µg/kg	500	20	02/01/12	PT12B01A	02/01/12	T212B01A
3. Lead	20000		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

Polychlorinated Biphenyls (PCBs) (EPA 3550C/EPA 8082A)				Aliquot ID: 48380-003A		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Aroclor-1016	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A
2. Aroclor-1221	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A
3. Aroclor-1232	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A
4. Aroclor-1242	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A
5. Aroclor-1248	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A
6. Aroclor-1254	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A
7. Aroclor-1260	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A
8. Aroclor-1262 (NN)	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A
9. Aroclor-1268 (NN)	U		µg/kg	330	10	01/31/12	PS12A31D	01/31/12	SB12A31A

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-003		Matrix: Soil/Solid		Analyst: JAS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
2. Bromodichloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
3. Bromoform	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
4. Bromomethane	U		µg/kg	200	1.0	02/01/12	V312B01A	02/01/12	V312B01A
5. Carbon Tetrachloride	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
6. Chlorobenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
7. Chloroethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
8. Chloroform	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
9. Chloromethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
10. Dibromochloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
11. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
12. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
13. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
14. 1,1-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
15. 1,2-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-003

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Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B4 (1-3)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **3** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-003			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
16. 1,1-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
17. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
18. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
19. 1,2-Dichloropropane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
20. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
21. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
22. Ethylbenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
23. Ethylene Dibromide	U		µg/kg	23	1.0	02/01/12	V312B01A	02/01/12	V312B01A
24. Methylene Chloride	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
25. Naphthalene	U		µg/kg	330	1.0	02/01/12	V312B01A	02/01/12	V312B01A
26. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
27. 1,1,2,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
28. Tetrachloroethene	380		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
29. Toluene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
30. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
31. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
32. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
33. Trichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
34. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
35. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
36. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
37. Vinyl Chloride	U		µg/kg	40	1.0	02/01/12	V312B01A	02/01/12	V312B01A
38. Xylenes	U		µg/kg	150	1.0	02/01/12	V312B01A	02/01/12	V312B01A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 48380-003A			Matrix: Soil/Solid		Analyst: HLS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
2. Acenaphthylene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
3. Anthracene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
4. Benzo(a)anthracene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
5. Benzo(a)pyrene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
6. Benzo(b)fluoranthene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
7. Benzo(ghi)perylene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
8. Benzo(k)fluoranthene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
9. Chrysene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
10. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
11. Fluoranthene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
12. Fluorene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-003

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B4 (1-3)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **3** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 48380-003A		Matrix: Soil/Solid		Analyst: HLS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
13. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
14. 2-Methylnaphthalene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
15. Phenanthrene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B
16. Pyrene	U		µg/kg	330	1.0	02/01/12	PS12B01B	02/01/12	S612B01B

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-004

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B1 (4-6)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **4** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-004A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	11		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

BTEX and TMB Isomers (EPA 5035/EPA 8260B)				Aliquot ID: 48380-004			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. Ethylbenzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Naphthalene	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Toluene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Xylenes	U		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 48380-004A			Matrix: Soil/Solid		Analyst: HLS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
3. Anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
4. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
5. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
6. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
7. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
8. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
9. Chrysene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
10. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
11. Fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
12. Fluorene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
13. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
14. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
15. Phenanthrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
16. Pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-005

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B1 (15-17)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **5** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-005A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	15		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

BTEX and TMB Isomers (EPA 5035/EPA 8260B)				Aliquot ID: 48380-005			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. Ethylbenzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Naphthalene	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Toluene	430		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Xylenes	220		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 48380-005A			Matrix: Soil/Solid		Analyst: HLS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
3. Anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
4. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
5. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
6. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
7. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
8. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
9. Chrysene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
10. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
11. Fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
12. Fluorene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
13. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
14. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
15. Phenanthrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A
16. Pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	01/31/12	S712A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-006

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B5 (6-8)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **6** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-006A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	15		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-006A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	17000		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST VOCs by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-006			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Ethylbenzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Ethylene Dibromide	U		µg/kg	24	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 2-Methylnaphthalene (NN)	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. MTBE	U		µg/kg	250	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. Naphthalene	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Toluene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
9. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
10. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
11. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
12. Xylenes	U		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-007

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **Sample Dup** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **7** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-007A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	18		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-007A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	13000		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST VOCs by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-007			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Ethylbenzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Ethylene Dibromide	U		µg/kg	24	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 2-Methylnaphthalene (NN)	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. MTBE	U		µg/kg	250	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. Naphthalene	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Toluene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
9. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
10. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
11. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
12. Xylenes	U		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-008

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT- B-7 (1-3)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **8** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-008A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	18		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-008A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	11000		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST VOCs by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-008			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Ethylbenzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Ethylene Dibromide	U		µg/kg	24	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 2-Methylnaphthalene (NN)	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. MTBE	U		µg/kg	250	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. Naphthalene	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Toluene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
9. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
10. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
11. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
12. Xylenes	U		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-009

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Client Identification:	AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description:	AKT- B-7 (13-15)	Chain of Custody:	109829
Client Project Name:	7092F-2-20	Sample No:	9	Collect Date:	01/26/12
Client Project No:	NA	Sample Matrix:	Soil/Solid	Collect Time:	NA
Sample Comments:	Soil results have been calculated and reported on a dry weight basis unless otherwise noted.				
Definitions:	Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.				

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-009A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	20		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-009A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	3600		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST VOCs by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-009		Matrix: Soil/Solid		Analyst: JAS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Ethylbenzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Ethylene Dibromide	U		µg/kg	25	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 2-Methylnaphthalene (NN)	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. MTBE	U		µg/kg	250	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. Naphthalene	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Toluene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
9. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
10. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
11. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
12. Xylenes	U		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-010

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-9 (6-8)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **10** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-010A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	14		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-010A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	300		µg/kg	50	20	02/01/12	PT12B01A	02/01/12	T212B01A
2. Chromium	14000		µg/kg	500	20	02/01/12	PT12B01A	02/01/12	T212B01A
3. Lead	22000		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-010			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
2. Bromodichloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
3. Bromoform	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
4. Bromomethane	U		µg/kg	200	1.0	02/01/12	V312B01A	02/01/12	V312B01A
5. Carbon Tetrachloride	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
6. Chlorobenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
7. Chloroethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
8. Chloroform	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
9. Chloromethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
10. Dibromochloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
11. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
12. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
13. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
14. 1,1-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
15. 1,2-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
16. 1,1-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
17. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
18. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
19. 1,2-Dichloropropane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
20. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
21. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
22. Ethylbenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
23. Ethylene Dibromide	U		µg/kg	23	1.0	02/01/12	V312B01A	02/01/12	V312B01A
24. Methylene Chloride	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
25. Naphthalene	U		µg/kg	330	1.0	02/01/12	V312B01A	02/01/12	V312B01A
26. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
27. 1,1,2,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-010

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-9 (6-8)** Chain of Custody: **109829**
Client Project Name: **7092F-2-20** Sample No: **10** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-010		Matrix: Soil/Solid		Analyst: JAS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
28. Tetrachloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
29. Toluene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
30. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
31. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
32. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
33. Trichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
34. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
35. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
36. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
37. Vinyl Chloride	U		µg/kg	40	1.0	02/01/12	V312B01A	02/01/12	V312B01A
38. Xylenes	U		µg/kg	150	1.0	02/01/12	V312B01A	02/01/12	V312B01A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 48380-010A		Matrix: Soil/Solid		Analyst: HLS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
3. Anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
4. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
5. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
6. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
7. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
8. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
9. Chrysene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
10. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
11. Fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
12. Fluorene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
13. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
14. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
15. Phenanthrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
16. Pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-011

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Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: AKT-B-9 (11-13)	Chain of Custody: 109827
Client Project Name: 7092F-2-20	Sample No: 11	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: NA

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-011A		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	3.8		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-011A		Matrix: Soil/Solid		Analyst: JLH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	71		µg/kg	50	20	02/01/12	PT12B01A	02/01/12	T212B01A
2. Chromium	3800		µg/kg	500	20	02/01/12	PT12B01A	02/01/12	T212B01A
3. Lead	4200		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-011		Matrix: Soil/Solid		Analyst: JAS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	2600		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
2. Bromodichloromethane	U		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
3. Bromoform	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
4. Bromomethane	U		µg/kg	200	1.0	02/01/12	V312B01A	02/01/12	V312B01A
5. Carbon Tetrachloride	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
6. Chlorobenzene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
7. Chloroethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
8. Chloroform	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
9. Chloromethane	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
10. Dibromochloromethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
11. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
12. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
13. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
14. 1,1-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
15. 1,2-Dichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
16. 1,1-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
17. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
18. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
19. 1,2-Dichloropropane	U		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
20. cis-1,3-Dichloropropene	U		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
21. trans-1,3-Dichloropropene	U		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
22. Ethylbenzene	120000		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
23. Ethylene Dibromide	U		µg/kg	21	1.0	02/01/12	V312B01A	02/01/12	V312B01A
24. Methylene Chloride	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
25. Naphthalene	39000		µg/kg	2100	100	02/01/12	V312B01A	02/01/12	V312B01A
26. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A
27. 1,1,1,2,2-Tetrachloroethane	U		µg/kg	100	1.0	02/01/12	V312B01A	02/01/12	V312B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-011

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-9 (11-13)** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **11** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

UST - Used Motor Oils - Volatiles, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-011			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
28. Tetrachloroethene	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
29. Toluene	500000		µg/kg	2100	200	02/02/12	V312B02A	02/02/12	V312B02A
30. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	02/01/12	V312B01A	02/01/12	V312B01A
31. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
32. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	02/01/12	V312B01A	02/01/12	V312B01A
33. Trichloroethene	U		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
34. 1,2,3-Trimethylbenzene (NN)	67000		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
35. 1,2,4-Trimethylbenzene	280000		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
36. 1,3,5-Trimethylbenzene	100000		µg/kg	1000	100	02/01/12	V312B01A	02/01/12	V312B01A
37. Vinyl Chloride	U		µg/kg	40	1.0	02/01/12	V312B01A	02/01/12	V312B01A
38. Xylenes	710000		µg/kg	3100	100	02/01/12	V312B01A	02/01/12	V312B01A

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3546/EPA 8270C)				Aliquot ID: 48380-011A			Matrix: Soil/Solid		Analyst: HLS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
2. Acenaphthylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
3. Anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
4. Benzo(a)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
5. Benzo(a)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
6. Benzo(b)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
7. Benzo(ghi)perylene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
8. Benzo(k)fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
9. Chrysene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
10. Dibenzo(a,h)anthracene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
11. Fluoranthene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
12. Fluorene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
13. Indeno(1,2,3-cd)pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
14. 2-Methylnaphthalene	5400		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
15. Phenanthrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A
16. Pyrene	U		µg/kg	330	1.0	01/31/12	PS12A31B	02/01/12	S712B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-012

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-8 (6-8)** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **12** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-012A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	13		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-012A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	11000		µg/kg	1000	20	02/01/12	PT12B01A	02/01/12	T212B01A

UST VOCs by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-012			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Ethylbenzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Ethylene Dibromide	U		µg/kg	23	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 2-Methylnaphthalene (NN)	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. MTBE	U		µg/kg	250	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. Naphthalene	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Toluene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
9. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
10. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
11. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
12. Xylenes	U		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-013

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-6 (1-3)** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **13** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-013A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	17		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-013A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	11000		µg/kg	1000	20	02/02/12	PT12B02C	02/02/12	T212B02A

UST VOCs by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-013			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Ethylbenzene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Ethylene Dibromide	U		µg/kg	24	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 2-Methylnaphthalene (NN)	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. MTBE	U		µg/kg	250	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. Naphthalene	U		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Toluene	U		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
9. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
10. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
11. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
12. Xylenes	U		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-014

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Date: 02/02/12

Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: BB	Chain of Custody: 109827
Client Project Name: 7092F-2-20	Sample No: 14	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Trace Elements by ICP/MS, Total Recoverable (EPA 3005A-M/EPA 6020A)				Aliquot ID: 48380-014A			Matrix: Ground Water		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	U		µg/L	1.0	10	01/31/12	PT12A31B	02/01/12	T212B01A
2. Chromium	U		µg/L	10	10	01/31/12	PT12A31B	02/01/12	T212B01A
3. Lead	U		µg/L	3.0	10	01/31/12	PT12A31B	02/01/12	T212B01A

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-014			Matrix: Ground Water		Analyst: CDH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
2. Bromodichloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
3. Bromoform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
4. Bromomethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
5. Carbon Tetrachloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
6. Chlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
7. Chloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
8. Chloroform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
9. Chloromethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
10. Dibromochloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
11. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
12. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
13. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
14. 1,1-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
15. 1,2-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
16. 1,1-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
17. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
18. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
19. 1,2-Dichloropropane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
20. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
21. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
22. Ethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
23. Ethylene Dibromide	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
24. Methylene Chloride	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
25. Naphthalene	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
26. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
27. 1,1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
28. Tetrachloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
29. Toluene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
30. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
31. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
32. 1,1,1,2-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-014

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **BB** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **14** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Ground Water** Collect Time: **NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)

Aliquot ID: 48380-014

Matrix: Ground Water

Analyst: CDH

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
33. Trichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
34. 1,2,3-Trimethylbenzene (NN)	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
35. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
36. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
37. Vinyl Chloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
38. Xylenes	U		µg/L	3.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535A/EPA 8270C)

Aliquot ID: 48380-014B

Matrix: Ground Water

Analyst: TMC

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
2. Acenaphthylene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
3. Anthracene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
4. Benzo(a)anthracene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
5. Benzo(a)pyrene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
6. Benzo(b)fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
7. Benzo(ghi)perylene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
8. Benzo(k)fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
9. Chrysene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
10. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
11. Fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
12. Fluorene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
13. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
14. 2-Methylnaphthalene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
15. Phenanthrene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
16. Pyrene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-015

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Date: 02/02/12

Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: FEB (S)	Chain of Custody: 109827
Client Project Name: 7092F-2-20	Sample No: 15	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Trace Elements by ICP/MS, Total Recoverable (EPA 3005A-M/EPA 6020A)				Aliquot ID: 48380-015A			Matrix: Ground Water		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	U		µg/L	1.0	10	01/31/12	PT12A31B	02/01/12	T212B01A
2. Chromium	U		µg/L	10	10	01/31/12	PT12A31B	02/01/12	T212B01A
3. Lead	U		µg/L	3.0	10	01/31/12	PT12A31B	02/01/12	T212B01A

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-015			Matrix: Ground Water		Analyst: CDH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
2. Bromodichloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
3. Bromoform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
4. Bromomethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
5. Carbon Tetrachloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
6. Chlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
7. Chloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
8. Chloroform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
9. Chloromethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
10. Dibromochloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
11. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
12. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
13. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
14. 1,1-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
15. 1,2-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
16. 1,1-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
17. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
18. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
19. 1,2-Dichloropropane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
20. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
21. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
22. Ethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
23. Ethylene Dibromide	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
24. Methylene Chloride	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
25. Naphthalene	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
26. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
27. 1,1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
28. Tetrachloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
29. Toluene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
30. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
31. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
32. 1,1,1,2-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-015

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Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **FEB (S)** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **15** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Ground Water** Collect Time: **NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)

Aliquot ID: 48380-015

Matrix: Ground Water

Analyst: CDH

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
33. Trichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
34. 1,2,3-Trimethylbenzene (NN)	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
35. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
36. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
37. Vinyl Chloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
38. Xylenes	U		µg/L	3.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535A/EPA 8270C)

Aliquot ID: 48380-015B

Matrix: Ground Water

Analyst: TMC

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/L	5.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
2. Acenaphthylene	U		µg/L	5.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
3. Anthracene	U		µg/L	5.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
4. Benzo(a)anthracene	U		µg/L	1.5	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
5. Benzo(a)pyrene	U		µg/L	1.5	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
6. Benzo(b)fluoranthene	U		µg/L	1.5	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
7. Benzo(ghi)perylene	U		µg/L	1.5	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
8. Benzo(k)fluoranthene	U		µg/L	1.5	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
9. Chrysene	U		µg/L	1.5	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
10. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
11. Fluoranthene	U		µg/L	1.5	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
12. Fluorene	U		µg/L	5.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
13. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
14. 2-Methylnaphthalene	U		µg/L	5.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
15. Phenanthrene	U		µg/L	2.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D
16. Pyrene	U		µg/L	5.0	1.5	02/01/12	PS12B01A	02/01/12	S112B01D

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-016

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Date: 02/02/12

Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: FEB (W)	Chain of Custody: 109827
Client Project Name: 7092F-2-20	Sample No: 16	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Trace Elements by ICP/MS, Total Recoverable (EPA 3005A-M/EPA 6020A)				Aliquot ID: 48380-016A			Matrix: Ground Water		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	U		µg/L	1.0	10	01/31/12	PT12A31B	02/01/12	T212B01A
2. Chromium	U		µg/L	10	10	01/31/12	PT12A31B	02/01/12	T212B01A
3. Lead	U		µg/L	3.0	10	01/31/12	PT12A31B	02/01/12	T212B01A

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-016			Matrix: Ground Water		Analyst: CDH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
2. Bromodichloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
3. Bromoform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
4. Bromomethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
5. Carbon Tetrachloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
6. Chlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
7. Chloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
8. Chloroform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
9. Chloromethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
10. Dibromochloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
11. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
12. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
13. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
14. 1,1-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
15. 1,2-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
16. 1,1-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
17. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
18. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
19. 1,2-Dichloropropane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
20. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
21. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
22. Ethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
23. Ethylene Dibromide	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
24. Methylene Chloride	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
25. Naphthalene	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
26. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
27. 1,1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
28. Tetrachloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
29. Toluene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
30. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
31. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
32. 1,1,1,2-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-016

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Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **FEB (W)** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **16** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Ground Water** Collect Time: **NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)

Aliquot ID: 48380-016

Matrix: Ground Water

Analyst: CDH

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
33. Trichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
34. 1,2,3-Trimethylbenzene (NN)	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
35. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
36. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
37. Vinyl Chloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
38. Xylenes	U		µg/L	3.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535A/EPA 8270C)

Aliquot ID: 48380-016B

Matrix: Ground Water

Analyst: TMC

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
2. Acenaphthylene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
3. Anthracene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
4. Benzo(a)anthracene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
5. Benzo(a)pyrene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
6. Benzo(b)fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
7. Benzo(ghi)perylene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
8. Benzo(k)fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
9. Chrysene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
10. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
11. Fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
12. Fluorene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
13. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
14. 2-Methylnaphthalene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
15. Phenanthrene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
16. Pyrene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-017

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-6 MS** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **17** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-017A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	15		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-017A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	32000		µg/kg	1000	20	02/02/12	PT12B02C	02/02/12	T212B02A

UST VOCs by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-017			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	2100		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. 1,2-Dichloroethane	4700		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Ethylbenzene	1900		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Ethylene Dibromide	4400		µg/kg	24	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 2-Methylnaphthalene (NN)	2400		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. MTBE	4200		µg/kg	250	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. Naphthalene	2600		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Toluene	2100		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
9. 1,2,3-Trimethylbenzene (NN)	2000		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
10. 1,2,4-Trimethylbenzene	2000		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
11. 1,3,5-Trimethylbenzene	1900		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
12. Xylenes	6100		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-018

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Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-6 MSD** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **18** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48380-018A			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	14		%	0.1	1.0	01/31/12	MC120131	02/01/12	MC120131

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)				Aliquot ID: 48380-018A			Matrix: Soil/Solid		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Lead	53000		µg/kg	1000	20	02/02/12	PT12B02C	02/02/12	T212B02A

UST VOCs by GC/MS, 5035 (EPA 5035/EPA 8260B)				Aliquot ID: 48380-018			Matrix: Soil/Solid		Analyst: JAS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	2100		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
2. 1,2-Dichloroethane	4800		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
3. Ethylbenzene	2000		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
4. Ethylene Dibromide	4600		µg/kg	23	1.0	01/31/12	V312A31A	01/31/12	V312A31A
5. 2-Methylnaphthalene (NN)	2500		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
6. MTBE	4100		µg/kg	250	1.0	01/31/12	V312A31A	01/31/12	V312A31A
7. Naphthalene	2700		µg/kg	330	1.0	01/31/12	V312A31A	01/31/12	V312A31A
8. Toluene	2200		µg/kg	50	1.0	01/31/12	V312A31A	01/31/12	V312A31A
9. 1,2,3-Trimethylbenzene (NN)	2100		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
10. 1,2,4-Trimethylbenzene	2100		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
11. 1,3,5-Trimethylbenzene	2000		µg/kg	100	1.0	01/31/12	V312A31A	01/31/12	V312A31A
12. Xylenes	6300		µg/kg	150	1.0	01/31/12	V312A31A	01/31/12	V312A31A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-019

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Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: MW-1	Chain of Custody: 109827
Client Project Name: 7092F-2-20	Sample No: 19	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Trace Elements by ICP/MS, Total Recoverable (EPA 3005A-M/EPA 6020A)				Aliquot ID: 48380-019A			Matrix: Ground Water		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	U		µg/L	1.0	10	01/31/12	PT12A31B	02/01/12	T212B01A
2. Chromium	U		µg/L	10	10	01/31/12	PT12A31B	02/01/12	T212B01A
3. Lead	U		µg/L	3.0	10	01/31/12	PT12A31B	02/01/12	T212B01A

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-019			Matrix: Ground Water		Analyst: CDH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	730		µg/L	25	100	02/01/12	VH12B01B	02/02/12	VH12B01B
2. Bromodichloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
3. Bromoform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
4. Bromomethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
5. Carbon Tetrachloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
6. Chlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
7. Chloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
8. Chloroform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
9. Chloromethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
10. Dibromochloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
11. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
12. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
13. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
14. 1,1-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
15. 1,2-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
16. 1,1-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
17. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
18. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
19. 1,2-Dichloropropane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
20. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
21. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
22. Ethylbenzene	160		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
23. Ethylene Dibromide	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
24. Methylene Chloride	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
25. Naphthalene	110		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
26. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
27. 1,1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
28. Tetrachloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
29. Toluene	2000		µg/L	25	100	02/01/12	VH12B01B	02/02/12	VH12B01B
30. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
31. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
32. 1,1,1,2-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-019

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Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **MW-1** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **19** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Ground Water** Collect Time: **NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-019			Matrix: Ground Water		Analyst: CDH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
33. Trichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
34. 1,2,3-Trimethylbenzene (NN)	230		µg/L	50	100	02/01/12	VH12B01B	02/02/12	VH12B01B
35. 1,2,4-Trimethylbenzene	1100		µg/L	50	100	02/01/12	VH12B01B	02/02/12	VH12B01B
36. 1,3,5-Trimethylbenzene	360		µg/L	50	100	02/01/12	VH12B01B	02/02/12	VH12B01B
37. Vinyl Chloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
38. Xylenes	1200		µg/L	150	100	02/01/12	VH12B01B	02/02/12	VH12B01B

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535A/EPA 8270C)				Aliquot ID: 48380-019B			Matrix: Ground Water		Analyst: TMC
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acenaphthene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
2. Acenaphthylene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
3. Anthracene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
4. Benzo(a)anthracene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
5. Benzo(a)pyrene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
6. Benzo(b)fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
7. Benzo(ghi)perylene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
8. Benzo(k)fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
9. Chrysene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
10. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
11. Fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
12. Fluorene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
13. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
14. 2-Methylnaphthalene	170		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
15. Phenanthrene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D
16. Pyrene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-020

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Date: 02/02/12

Client Identification:	AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description:	Sample Dup 2	Chain of Custody:	109827
Client Project Name:	7092F-2-20	Sample No:	20	Collect Date:	01/26/12
Client Project No:	NA	Sample Matrix:	Ground Water	Collect Time:	NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Trace Elements by ICP/MS, Total Recoverable (EPA 3005A-M/EPA 6020A)				Aliquot ID: 48380-020A			Matrix: Ground Water		Analyst: JLH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Cadmium	U		µg/L	1.0	10	01/31/12	PT12A31B	02/01/12	T212B01A
2. Chromium	U		µg/L	10	10	01/31/12	PT12A31B	02/01/12	T212B01A
3. Lead	U		µg/L	3.0	10	01/31/12	PT12A31B	02/01/12	T212B01A

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-020			Matrix: Ground Water		Analyst: CDH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Benzene	680		µg/L	25	100	02/01/12	VH12B01B	02/02/12	VH12B01B
2. Bromodichloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
3. Bromoform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
4. Bromomethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
5. Carbon Tetrachloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
6. Chlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
7. Chloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
8. Chloroform	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
9. Chloromethane	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
10. Dibromochloromethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
11. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
12. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
13. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
14. 1,1-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
15. 1,2-Dichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
16. 1,1-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
17. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
18. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
19. 1,2-Dichloropropane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
20. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
21. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
22. Ethylbenzene	140		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
23. Ethylene Dibromide	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
24. Methylene Chloride	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
25. Naphthalene	99		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
26. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
27. 1,1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
28. Tetrachloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
29. Toluene	1900		µg/L	25	100	02/01/12	VH12B01B	02/02/12	VH12B01B
30. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
31. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B
32. 1,1,1,2-Trichloroethane	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-020

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Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: Sample Dup 2	Chain of Custody: 109827
Client Project Name: 7092F-2-20	Sample No: 20	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

VOCs - UST - Used Motor Oils (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-020			Matrix: Ground Water		Analyst: CDH	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch	
33. Trichloroethene	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B	
34. 1,2,3-Trimethylbenzene (NN)	220		µg/L	50	100	02/01/12	VH12B01B	02/02/12	VH12B01B	
35. 1,2,4-Trimethylbenzene	1000		µg/L	50	100	02/01/12	VH12B01B	02/02/12	VH12B01B	
36. 1,3,5-Trimethylbenzene	330		µg/L	50	100	02/01/12	VH12B01B	02/02/12	VH12B01B	
37. Vinyl Chloride	U		µg/L	1.0	1.0	01/31/12	VH12A31B	02/01/12	VH12A31B	
38. Xylenes	1200		µg/L	150	100	02/01/12	VH12B01B	02/02/12	VH12B01B	

Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535A/EPA 8270C)				Aliquot ID: 48380-020B			Matrix: Ground Water		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch	
1. Acenaphthene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
2. Acenaphthylene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
3. Anthracene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
4. Benzo(a)anthracene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
5. Benzo(a)pyrene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
6. Benzo(b)fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
7. Benzo(ghi)perylene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
8. Benzo(k)fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
9. Chrysene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
10. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
11. Fluoranthene	U		µg/L	1.1	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
12. Fluorene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
13. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
14. 2-Methylnaphthalene	180		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
15. Phenanthrene	U		µg/L	2.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	
16. Pyrene	U		µg/L	5.0	1.1	02/01/12	PS12B01A	02/01/12	S112B01D	

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-022

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Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-3 SG** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **22** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Air** Collect Time: **NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

TO-15 (TO-15)		Aliquot ID: 48380-022			Matrix: Air		Analyst: RDK		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone (NN)	U		ppbv	13	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
2. Benzene (NN)	1.0		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
3. Benzyl Chloride (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
4. Bromodichloromethane (NN)	U		ppbv	0.37	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
5. Bromoform (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
6. Bromomethane (NN)	U		ppbv	1.1	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
7. 1,3-Butadiene (NN)	U		ppbv	0.54	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
8. 2-Butanone (NN)	2.6		ppbv	1.1	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
9. Carbon Disulfide (NN)	U		ppbv	2.5	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
10. Carbon Tetrachloride (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
11. Chlorobenzene (NN)	0.44		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
12. Chloroethane (NN)	U		ppbv	0.35	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
13. Chloroform (NN)	U		ppbv	0.33	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
14. Chloromethane (NN)	U		ppbv	1.1	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
15. Cyclohexane (NN)	U		ppbv	2.5	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
16. Dibromochloromethane (NN)	U		ppbv	0.37	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
17. 1,2-Dichlorobenzene (NN)	U		ppbv	0.55	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
18. 1,3-Dichlorobenzene (NN)	U		ppbv	0.55	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
19. 1,4-Dichlorobenzene (NN)	U		ppbv	0.55	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
20. Dichlorodifluoromethane (NN)	U		ppbv	0.46	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
21. 1,1-Dichloroethane (NN)	U		ppbv	0.37	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
22. 1,2-Dichloroethane (NN)	U		ppbv	0.37	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
23. 1,1-Dichloroethene (NN)	U		ppbv	0.36	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
24. cis-1,2-Dichloroethene (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
25. trans-1,2-Dichloroethene (NN)	U		ppbv	0.33	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
26. 1,2-Dichloropropane (NN)	U		ppbv	1.1	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
27. cis-1,3-Dichloropropene (NN)	U		ppbv	0.36	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
28. trans-1,3-Dichloropropene (NN)	U		ppbv	0.40	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
29. 1,4-Dioxane (NN)	U		ppbv	0.37	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
30. Ethyl Acetate (NN)	U		ppbv	0.99	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
31. Ethylbenzene (NN)	0.53		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
32. Ethylene Dibromide (NN)	U		ppbv	0.36	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
33. 4-Ethyltoluene (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
34. n-Heptane (NN)	2.0		ppbv	0.35	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
35. Hexachlorobutadiene (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
36. n-Hexane (NN)	2.2		ppbv	0.33	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
37. 2-Hexanone (NN)	U		ppbv	1.1	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
38. Isopropanol (NN)	U		ppbv	3.7	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
39. Methylene Chloride (NN)	U		ppbv	2.7	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-022

Order: 48380
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Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **AKT-B-3 SG** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **22** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Air** Collect Time: **NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

TO-15 (TO-15)		Aliquot ID: 48380-022			Matrix: Air		Analyst: RDK		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
40. 4-Methyl-2-pentanone (NN)	U		ppbv	0.89	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
41. MTBE (NN)	U		ppbv	0.35	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
42. Propylene (NN)	35		ppbv	2.7	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
43. Styrene (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
44. 1,1,2,2-Tetrachloroethane (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
45. Tetrachloroethene (NN)	980		ppbv	7.0	25	01/31/12	VA12A31A	01/31/12	VA12A31A
46. Tetrahydrofuran (NN)	U		ppbv	2.6	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
47. Toluene (NN)	4.5		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
48. 1,2,4-Trichlorobenzene (NN)	U		ppbv	2.7	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
49. 1,1,1-Trichloroethane (NN)	1.9		ppbv	0.37	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
50. 1,1,2-Trichloroethane (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
51. Trichloroethene (NN)	1.8		ppbv	0.37	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
52. Trichlorofluoromethane (NN)	U		ppbv	0.34	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
53. 1,1,2-Trichlorotrifluoroethane (NN)	U		ppbv	0.36	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
54. 1,2,4-Trimethylbenzene (NN)	0.49		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
55. 1,3,5-Trimethylbenzene (NN)	U		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
56. Vinyl Acetate (NN)	U		ppbv	1.1	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
57. Vinyl Chloride (NN)	U		ppbv	0.35	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
58. m&p-Xylene (NN)	1.7		ppbv	0.76	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A
59. o-Xylene (NN)	0.75		ppbv	0.38	1.0	01/30/12	VA12A30A	01/30/12	VA12A30A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-023

Order: 48380
Page: 35 of 37
Date: 02/02/12

Client Identification: AKT Peerless Environ. Svcs, Inc. - Farm. Hills	Sample Description: Trip Blank	Chain of Custody: 109827
Client Project Name: 7092F-2-20	Sample No: 23	Collect Date: 01/26/12
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-023			Matrix: Ground Water		Analyst: CDH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/L	50	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
2. Acrylonitrile	U		µg/L	2.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
3. Benzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
4. Bromobenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
5. Bromochloromethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
6. Bromodichloromethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
7. Bromoform	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
8. Bromomethane	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
9. 2-Butanone	U		µg/L	25	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
10. n-Butylbenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
11. sec-Butylbenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
12. tert-Butylbenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
13. Carbon Disulfide	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
15. Chlorobenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
16. Chloroethane	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
17. Chloroform	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
18. Chloromethane	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
20. Dibromochloromethane	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
21. 1,2-Dibromo-3-chloropropane (NN)	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
22. Dibromomethane	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
33. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
34. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
35. Ethylbenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
36. Ethylene Dibromide	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
37. 2-Hexanone	U		µg/L	50	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
38. Isopropylbenzene	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
39. Methyl Iodide	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A

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Analytical Laboratory Report
Laboratory Project Number: 48380
Laboratory Sample Number: 48380-023

Order: 48380
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Date: 02/02/12

Client Identification: **AKT Peerless Environ. Svcs, Inc. - Farm. Hills** Sample Description: **Trip Blank** Chain of Custody: **109827**
Client Project Name: **7092F-2-20** Sample No: **23** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Ground Water** Collect Time: **NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B)				Aliquot ID: 48380-023			Matrix: Ground Water		Analyst: CDH
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
40. Methylene Chloride	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
41. 2-Methylnaphthalene (NN)	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
42. 4-Methyl-2-pentanone	U		µg/L	50	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
43. MTBE	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
44. Naphthalene	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
45. n-Propylbenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
46. Styrene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
47. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
48. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
49. Tetrachloroethene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
50. Toluene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
51. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
52. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
53. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
54. Trichloroethene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
55. Trichlorofluoromethane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
56. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
57. 1,2,3-Trimethylbenzene (NN)	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
58. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
59. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
60. Vinyl Chloride	U		µg/L	1.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A
61. Xylenes	U		µg/L	3.0	1.0	02/01/12	VH12B01A	02/01/12	VH12B01A

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Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- *:** Value reported is outside QA limits

Exception Summary:



Accreditation Number:

E-10395

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Chain of Custody #
109827
 PAGE 2 of 2

Client Name: AKT Fearless		Contact Person: Megan Gotsch		Project Name/ Number: 7012F	
Purchase Order#		Client Sample Descriptor		Matrix (SEE RIGHT CORNER FOR CODE)	
Lab Sample #	Date	Time	Client Sample #	PREPARED (Y/N)	PARAMETERS
	1/20		AKT-B-9 (11-13)	X	Lead Pb VOC MTBE Used oil X
			AKT-B-8 (6-8)	X	
			AKT-B-6	X	
			BB	Y	
			FEB(S)	Y	
			FEB(W)	Y	
			AKT-B-6 (red)	X	
			MW-1	Y	
			Single Dye 2	Y	
			AKT-B-X	X	
			AKT-B-35G	X	
Comments: G1					
Relinquished By: Megan Gotsch		Date/ Time: 1/20 3:58	Received By: M. Gotsch		
Relinquished By: [Signature]		Date/ Time: 1/27/12 3:26	Received By: [Signature]		
Relinquished By: [Signature]		Date/ Time:	Received By Laboratory:		
LAB USE ONLY: Fibertec project number: 210 ' 48380 Laboratory Tracking: 210 ' 48380 Temperature at Receipt:					

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 eOC Revision: April 2006

ICE

TERMS & CONDITIONS ON BACK

